Librarians, Teachers or Hybrid Professionals?

An investigation into Information Literacy job roles in Further and Higher Education contexts, and whether Library Schools are preparing students for these roles within the UK

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Summary

The purpose of the research was to determine whether library and information science (LIS) professionals, employed in job roles with an element of information literacy (IL) teaching within UK further and higher education contexts, are librarians, teachers, or whether they have hybrid roles. The research explored the skills and qualifications required for these roles, with the following objectives:

- To determine whether LIS professionals should complete formal teaching qualifications.

- To identify whether UK Library School curricula contains IL content and teaching skills.

- To establish whether the skills taught on LIS programmes match the expectations of employers for those job roles which require an element of IL teaching and user education.

The researcher conducted a literature review and then used content analysis to examine job descriptions and person specifications that had an element of IL teaching from jobs advertised between April-December 2013, along with a content analysis of LIS courses running in the academic year 2014-15. Univariate and bivariate analysis was then completed. LIS professionals would be advised to complete teaching qualifications, although the results showed that having an undergraduate degree in any subject was the second most essential category overall, thereby placing this above teaching qualifications and below previous experience within an information related role. LIS courses within the UK were found to have IL content, but were lacking in teaching and training skills content, thereby potentially ill-preparing students for teaching duties. The size of the samples regarding job descriptions and person specifications, and the difficulties of obtaining detailed content of LIS courses, are limitations which affect the value and trustworthiness of the findings. However, the research does provide an insight into the current situation regarding librarians as teachers, highlighting they are hybrid professionals. Recommendations for further study are also provided.

DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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STATEMENT 1

This work is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

Other sources are acknowledged by footnotes and/or an appropriate citation method giving explicit references. A bibliography is appended.

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STATEMENT 2

I hereby give consent for my work, if accepted, to be available for photocopying and for inter-library loan, and for the title and summary to be made available to outside organisations.

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Abbreviations

AFHEA	Associate Fellow of the Higher Education Academy
ALT	Association of Learning Technologies
ARLG	Academic and Research Libraries Group
AUT	Association of University Teachers
Cert Ed	Certificate in Education
CILIP	Chartered Institute of Library and Information Professionals
CIPD	Chartered Institute for Personnel and Development
CofHE	Colleges of Further and Higher Education Group
ECDL	European Computer Diving Licence
FE	Further Education
HE	Higher Education
HEA	Higher Education Academy
IfL	Institute for Learning
IL	Information Literacy
ILT	Information and Learning Technologies
LILAC	Librarians' Information Literacy Annual Conference
LISA	Library and Information Science Abstracts
LISTA	Library, Information Science & Technology Abstracts
LIS	Library and Information Science
PGCE	Postgraduate Certificate in Education
PGCert	Postgraduate Certificate
PGCHE	Postgraduate Certificate in Higher Education
PhD	Doctor of Philosophy
PKSB	Professional Knowledge and Skills Base
PTLLS	Preparing to Teach in the Lifelong Learning Sector
SCONUL	Society of College, National and University Libraries
UK	United Kingdom
UKPSF	United Kingdom Professional Standards Framework
VLEs	Virtual Learning Environments

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Chapter 1: Introduction

1.1   Introduction

This chapter covers the background and context to the research. The research questions, and aims and objectives, are given, along with the structure of the dissertation.

1.1.1   Background – What's in a name?

Librarians, teachers, or hybrid professionals? A 'teaching librarian', within an academic context, is an umbrella term that may encompass the more traditional job titles of 'Subject Librarian' or 'Academic Liaison Librarian', along with the more current Library and Information Science (LIS) job titles of 'Learning Centre Tutor' or 'Learning Resources Advisor'. Essentially, it relates to all those LIS professionals whose focus is on supporting learners through the provision of providing information literacy (IL) training. Levy and Roberts (2005) highlight how LIS professionals are facing the blurring of boundaries between themselves and those of 'academics, learning technologists, information technologists, educational developers, skills support specialists and others' (p. xi). The problem, as acknowledged by Levy and Roberts (2005, p. xiii), is with regards to language and definitions; numerous terms are used to describe services within LIS. This can be applied to job titles as these vary, but in essence, they are very similar roles.

1.1.2   Defining a Teacher: Defining a Librarian

Central to the discussion is the concept of the 'librarian as teacher'. Firstly, the variety of definitions of a teacher need to be addressed. The Oxford Dictionary of English (2006) defines a 'Teacher' as 'a person who teaches, especially in a school' (p. 1809). However, Polger and Okamoto (2010) expand their definition of a teacher to include 'anyone who uses a variety of methods to share knowledge with another person. It is our belief that anyone can be a teacher and teaching and learning can occur outside of the classroom' (p. 1). Teaching appears

in a variety of educational contexts, not merely in a school. In view of this, the work of a librarian, especially one who has an IL training function, matches the criteria of a teacher. The role of a 'Tutor' can be defined as 'a teacher who is responsible for individuals or small groups, used especially at higher levels of education' (Dictionary of Information and Library Management, 2006, p. 212). This is also appropriate, and therefore, for the purposes of this dissertation, both the terms of 'teacher' and 'tutor' will be used.

As to the job title of 'Librarian', the Dictionary of Information and Library Management (2006) defines this as 'a person who has usually been trained in librarianship and who works in a library' (p. 118). This offers no details regarding the variety of tasks and functions that characterise the twenty-first century LIS professional, one of which is teaching. In order to distinguish those LIS professionals whose remit is to deliver some form of IL, the term 'teaching librarian' is used throughout this dissertation to encompass these professionals. The teaching librarian has only recently been recognised as belonging to a specialist sub-group within LIS (McGuinness, 2011a, p. 1), highlighting how its importance has grown, along with an acceptance that the role exists.

There are a number of marked differences with regards to those LIS professionals who teach, and those who are school teachers or academics. These are outlined in Table 1, which highlights how these differences occur with regards to teaching being part of a much larger remit for the LIS professional, rather than a main function of a school teacher, or one of three core activities for an academic. Also of note is how a teaching librarian is not likely to be a qualified teacher; their experience is most likely to be developed on the job and may be intermittent in nature. In view of this, a teaching librarian role is closest to that of an academic, rather than a school teacher, and at present they have no constraints placed on their teaching by professional bodies or institutional policies (unlike an academic), nor is their teaching performance regularly formally evaluated (unlike a school teacher). Consequently, a teaching librarian appears to be left behind with regards to their professional training; any formal teaching qualifications will be completed due to their own motivation.

Teaching librarians	School teachers	Teaching faculty
Instruction one of a number of core activities	Instruction the primary professional activity	Instruction one of three core areas of activity, alongside research and administration/ service
Instruction not carried out by all members of the profession	Instruction carried out by all members of the profession	Instruction carried out by vast majority of the profession, with occasional breaks (sabbaticals, etc.)
Pre-service instructional training not compulsory, and not always accessible	Pre-service instructional training compulsory	Pre-service instructional training not compulsory, and not always accessible
Instructional approaches frequently learned on the job	Instructional approaches acquired during pre-service training, and developed on the job	Instructional approaches often developed during graduate education teaching assistantships, and further developed on the job post-graduation
Instruction often takes place on a 'one shot' basis – little opportunity for rapport with students	Instruction is ongoing over time, allowing build-up of rapport with student groups	Instruction ongoing, but frequently distance maintained between staff and students
Content and format depend on context and resources. Often instigated in response to a request	Content and format based on set curricula	Content and format based on teaching faculty's interests, departmental/school priorities, institutional structures and policies, and requirements of professional bodies
Teaching performance not regularly evaluated	Teaching performance monitored and evaluated	Teaching performance not regularly evaluated

Table 1: Differences between teaching librarians, school teachers and academics (McGuinness, 2011b, p. 53)

1.2   Context & Scope

The primary focus of this research is LIS professionals working in an academic context in the United Kingdom (UK); hence those who work in further education (FE) and higher education (HE), which were chosen due to practical constraints. Within the UK, this is in the context of an FE/HE College, or a University. LIS professionals employed in these institutions are affected by both educational, and technological, developments. Drivers for change include the pressures for LIS professionals to be more pedagogically aware, along with the shift in

emphasis from 'user education' to 'information literacy' (Brophy, 2005, p. 20). Curtis (2011) lists the following uncertainties that will impact upon the academic LIS sector in the future:

- How UK HE will be funded and operated
- How information will be created, discovered, accessed and managed
- How learning, teaching and research will evolve to take best advantage of improvements in Information and Communications Technology
- The information needs of users for learning, teaching and research, the knowledge economy
- Students and researchers as 'consumers' (p. 3).

The Society of College, National and University Libraries (SCONUL, 2013) states, 'the work the library undertakes contributes directly to the institution's academic mission and to equipping students with the skills and knowledge they need to achieve academically and to maximise their employability' (para. 1). Subsequently, IL and those who teach it, contribute to the overall successes of these institutions. The Colleges of Further and Higher Education Group (CofHE) of the Chartered Institute of Library and Information Professionals (CILIP), (now part of the Academic and Research Libraries Group (ARLG) of CILIP), recognises this importance, as Eynon (2005) states 'every learning resource service must offer induction and ongoing information-literacy building programmes' (p. 2). Recommendations for qualifications amongst LIS staff are made to ensure that these IL programmes are of a high standard; specialisms and skills of LIS staff should include library and information work, ICT and e-learning, and also, if possible, include teaching or learning support qualifications (Eynon, 2005, p. 3). Thus highlighting how the teaching librarian should be multi-qualified to maximise their contribution to the changing teaching and learning environment.

1.2.1 Limitations

It is beyond the scope of this research to focus on the 'teacher-librarian'; a role that for the context of this dissertation should not be confused with that of the 'teaching librarian'. A 'Teacher Librarian' is defined as 'a person who is qualified as a teacher and a school librarian' (Dictionary of Information and Library Management, 2006, p. 204). This role is therefore schools-based, and is well established within America, Australia, and Canada. This dissertation

is concerned with whether this ideal of a dually-qualified individual is transferred to a FE/HE environment, within the UK.

1.3   Researcher background & Justification for the research

This research is timely; it was conceived during experience gained from working in the Learning Centre of an FE/HE College in the UK, where staff were undertaking formal teaching qualifications with regards to delivering IL workshops and one-to-one student support. From undertaking a distance-learning postgraduate information and library studies course, where there was no opportunity to take a formal credit bearing module in IL, it was decided to analyse the content of UK library school courses. To determine whether library schools should be offering IL modules, job descriptions and person specifications that specified an LIS professional's role of IL teaching were analysed. Combining the results of library school curricula and the analysis of current jobs determined whether library schools were producing LIS professionals who matched current employer expectations.

1.3.1   Research Questions

The following research questions were generated and inform the following Literature Review:

- Is there a distinction between training and teaching when working in the LIS profession; to what extent do LIS professionals teach?

- Is there justification that LIS professionals should have formal teaching qualifications?

- Is professional membership of relevant teaching and learning organisations necessary and/or advisable for LIS professionals?

- Do UK Library Schools prepare graduates for IL roles?

1.4   Research Aims

The aim of this research is to discover what skills and qualifications are required for LIS professionals within IL job roles, in FE/HE contexts in the UK, and if LIS professionals should hold formal teaching qualifications. It aims to examine current job roles that have an element of IL teaching, along with the content of current LIS courses, in order to evaluate whether library schools are preparing graduates for these roles.

1.5   Research Objectives

The objectives of this research are:

- To determine whether LIS professionals should complete formal teaching qualifications.

- To identify whether UK Library School curricula contains IL content and teaching skills.

- To establish whether the skills taught on LIS programmes match the expectations of employers for those job roles which require an element of IL teaching and user education.

1.6   Structure of this dissertation

The structure of this dissertation takes the form of five chapters, including this introductory chapter. Chapter 2, the Literature Review, analyses the literature on librarians as teachers. Chapter 3 explains the Methodology, with Chapter 4 being the Results and Discussion. Chapter 5 is the Conclusion, which also identifies the limitations of the research and provides recommendations for further study.

The Harvard APA 6th edition referencing and citation style is used throughout this dissertation.

Chapter 2: Literature Review

2.1   Introduction

This literature review addresses the research questions identified in Chapter 1. The terms of 'librarian' and 'LIS professional' are used interchangeably throughout.

2.1.2 Search strategy

The literature search strategy is contained within Chapter 3.

2.2.   Professional identity: a preoccupation with status?

In the 1950s, the explicit teaching role of librarians first emerged within the UK, however, within America this was already common (Pugh, 1971, p. 206). The role of 'Tutor Librarian' within the UK was created in the Hertfordshire County Council Technical Library and Information Service, in response to the advancement in scientific and technological knowledge as a result of the Second World War (Wright, 1960, p. 190). Three main duties that a Tutor Librarian carried out were: those of a librarian, the instruction to users as to how to use the library, and occasionally lecturing in an academic subject (Pugh, 1971, p. 206). The job title of 'Tutor Librarian' still exists today; Tutor Librarians provide student support, which includes assignment and referencing help, and finding resources (City College Plymouth Learning Resources, 2013, para. 1). This presents a problem as to whether LIS professionals should be classed as faculty members, given the roles they perform and the emphasis on student support.

This faculty status of librarians (especially within America) has been given encyclopaedic treatment (De Priest, 1973; Hall, 1990; Mitchell and Morton, 1992; Cary, 2001; Hoggan, 2003; Murray-Rust, 2005; Kemp, 2006). Historically, some argued that librarians were not teachers; as a result of librarians being preoccupied with status they saw themselves as teachers, but in fact they should have focused on their main profession of librarianship (Blackburn, 1968; Gore,

1971; Kister, 1971; Pugh, 1971; Wilson, 1979). For a librarian to be considered a teacher, there are those who agreed that a librarian needed to engage in those activities more generally associated with a teacher or academic, such as researching and publishing (Powell, 1970, p. 385; Kister, 1971, p. 3285). Critics of this included Budd (1982, p. 1946) and De Priest (1973, pp. 151-152) who believed and proved that librarians could, and did, both of these activities. A question remains as to whether this would automatically give them the label of 'teacher'. The traditional stereotype of a librarian as someone who merely stamps books does not help the profession either, as it does not show the diversity of librarianship (Walter, 2008, p. 63).

Recognition for the teaching function of LIS professionals and how this is reflected in their professional identity is a concern, and in 2010 an inaugural 'Librarians as Teachers' event was held. The purpose of this was to look at the status and role of librarians who delivered teaching, along with the practical ways that librarians could develop their teaching skills and gain recognition for their work (Cragg, 2010, para. 1). This concurs with Budd (1982) who argued that 'teaching is an integral part of the job [of a librarian]' (p. 1944). Even Wilson (1979) wrote, 'Librarians sometimes teach', but she regained her previous stance of denying librarians as teachers by arguing how 'teaching is a small part of the set of behaviours that constitute the role of librarian' (p. 155), and that it did not make a librarian a teacher; a librarian had (and continues to have) many different roles and skills. Her conclusion is convincing, but other LIS literature suggests that it is not enough to be referred to as a librarian; librarians must be categorised and defined by other labels, perhaps for reasons concerning negative stereotypes.

Another stance adopted is that academic librarians should be grouped under the status of academic administrators, a viewpoint that Gore (1971) put forward by arguing that it was 'better to be recognised as a respectable administrator than a sham teacher' (p. 295). Previous research is therefore suggesting that an identity conflict has emerged within the LIS profession of whether it is perceived as a service department, or an academic discipline, within institutions (Mitchell and Morton, 1992, p. 385). The two categories of administrators or support staff are used when discussing the role of library staff within HE organisations, rather than the category of teaching staff (StevenB, 2010, para. 3). The librarian within their institution can now be seen a student advisor, as according to SCONUL (2013, para. 12), undergraduates may spend less time with lecturers than with a librarian. Librarians are

therefore in a supporting, not a teaching, role. This highlights the problems regarding categorisation within academic environments.

2.3   IL & the teaching librarian

The argument for faculty status and the categorisation of LIS professionals is a major concern; what is a librarian teaching and can the literature illuminate whether LIS professionals should be recognised as teachers? Crawford (2012, p. 2) lists the many demands of the job of an Academic Liaison Librarian, one of which is the teaching of IL. However, there is no single, authoritative definition of IL (Big Blue, 2002, p. 6; Walsh, 2011, pp. 3-4). Table 2 outlines the various definitions of IL, however Budd (1982) identified what he called 'an artificial line' between instruction and information, arguing that, 'There is no clear distinction between instruction and the provision of information. One necessarily encompasses the other' (p. 1944). Walsh (2011) is more balanced in his view, arguing that 'library instruction has morphed from its humble beginnings as bibliographical instruction to IL instruction' (p. 8), thereby demonstrating the power of interpretation and opinion of authors.

Organisation	Definition of IL / Information Literate people
CILIP (2013a)	'Knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner' (para. 1).
Society of College, National and University Libraries (SCONUL) Working Group on Information Literacy (2011)	'Demonstrate an awareness of how they gather, use, manage, synthesize and create information and data in an ethical manner and [they] will have the information skills to do so effectively' (p. 3).
JISC, historically known as the Joint Information Systems Committee (2005)	JISC defines 'i-skills' (information skills) as the ability to 'identify, assess, retrieve, evaluate, adapt, organise and communicate information within an iterative context of review and reflection' (p. 3).
Research Information Network (2010)	They argue that a broader approach must be taken, 'which (i) recognises that 'information' must be taken to include research data; and (ii) clearly also encompasses the ability to manage, and where appropriate preserve and curate one's own information and data' (para. 2).

Marketing is another approach to the argument of librarians as teachers, as LIS professionals need to promote themselves and their IL programmes to all groups. As a result, Walsh (2011) writes, 'Librarians are not teaching when they are invited to perform a one-class period lecture on the use of the library and its resources; they are marketing' (p. 7). Although he is referring specifically to one-off IL sessions, his viewpoint suggests that a rethink is necessary. One-shot IL sessions are therefore viewed as marketing, rather than teaching (Kenney, 2008, pp. 3-4). Ardis (2005a, para. 3) agrees, arguing that librarians are 'guest-lecturers' and this is why they are marketing; Table 3 compares basic marketing goals with those of library instruction, and as she highlights, these goals can be applied to those of IL.

Marketing	Information Literacy/Bibliographic Instruction
Introduce new products	Introduce new library services/tools
Extend or regain market for existing products	Extend usage of library tools
Enter new territories	Inform new students/faculty
Boost sales of a particular product	Increase usage of a particular tool or service
Cross-sell or bundle one product with another	Demonstrate how specific tools and services work together--e.g. EI and INSPEC.
Refine a product	Improve reference services

Table 3: Comparison of basic marketing goals with those of library instruction (Ardis, 2005b)

2.4   Are LIS professionals really teaching, or are they training?

The question of teacher-identity within the literature is important. A report by the Association of University Teachers (AUT) in 2001 found that librarians were working more

closely with academics, teaching information technology skills, preparing teaching materials and integrating learning technology into course teaching (Court, 2001, p. 234). The literature has produced arguments regarding teaching and training, and the extent to which LIS professionals are engaged in them. Pullinger and Schneider (2010a) asked delegates attending their presentation at the Librarians' Information Literacy Annual Conference (LILAC) 2010, to consider the following questions:

- Do librarians train or teach? / Do you consider yourself a trainer or a teacher?
- What's the difference?
- Does it matter if we call ourselves trainers or teachers? (slide 3).

During this event, it was concluded that the question of whether librarians are teachers was a major theme, however no one in attendance could agree on an answer (Westwood and Langman, 2010, p. 11). Pullinger and Schneider (2010b, slide 4) offered their analysis of training versus teaching which is revealed in Table 4. It appears that training is considered very specific, such as providing library users with the skills to use a particular tool, for example, how to search a database. In view of this, Pullinger and Schneider (2010b, slide 4) argue that if what a LIS professional delivers is more like that of a trainer, they should be classed as a 'Teaching Librarian', rather than a 'Teacher Librarian'. This is echoed by Lupton (2002, p. 76) who argues that a wider view needs to be adopted by librarians, so that they see themselves as 'Teacher Librarians'. Terminologies, and labels, are again coming into focus and how these define an LIS professional.

Training	Teaching
Skills to use a particular tool/library	Transferable skills that can be applied
'Library/resource centred'	'Learner centred'
Emphasis on location and retrieval	Holistic educational outcome
Surface learning	Deep learning
Bolt on/one-off lecture in a module	Embedded in curriculum
Teaching Librarian	Teacher Librarian

Table 4: Differences between training and teaching (Pullinger and Schneider, 2010b, slide 4)

But is this too simplistic? As previously discussed in Chapter 1, a 'Teacher Librarian' is found within school libraries, however the literature suggests that this label of 'Teacher Librarian' should be applied within FE/HE environments, in order to give librarians greater status and

recognition for their teaching function. With regards to 'Training', the Dictionary of Information and Library Management (2006) defines this as 'the act of teaching somebody specific skills' (p. 210), which suggests that the terms of 'training' and 'teaching' are used interchangeably. A clear definition of this teaching/training identity is given by Lupton (2002) who writes, 'Primary differences between the teacher-librarian and the teaching librarian include self-image, academic qualifications and cultural norms of the institution. Teacher librarians see themselves as teachers first, librarians second' (p. 76). This is reversed for teaching librarians, who see themselves as a librarian first, and a teacher or trainer second. Perhaps both terms should be used within the profession, according to the individual's circumstances. However, this may cause greater confusion.

Looking ahead, a number of remarks concerning the death of the academic library by the year 2050 includes how IL will have become fully integrated into the curriculum (Sullivan, 2011, para 3); this is an emerging area and one which Pullinger and Schneider (2010a, slide 7) also mention. This calls for the 'embedded librarian' (the integration of LIS professionals within the teaching, learning and research of their organisations) to feature prominently within FE/HE institutions. As Dewey (2004) writes, 'Curriculum development and the integration of IL and library user education…can only be achieved through direct and concerted involvement by librarians in developing overarching goals for the educated graduate of that particular institution' (p. 12). Davis, Lundstrom and Martin (2011, p. 693) take this a stage further, arguing that whether librarians identify themselves as teachers depends on which type of IL instruction model they employ: the course-integrated model or the for-credit model. Their results showed, as expected, that librarians who teach for-credit IL instruction are more likely to consider themselves as teachers than those who teach IL as part of course integrated sessions. Depending upon the IL instruction model that is used, this impacts greatly on the LIS professional's teaching identity.

Training is library and resource centred, rather than learner centred, which characterises a teaching role. It can be said that training provides surface learning, as opposed to teaching, which enables deep learning. Both Lupton (2002, p. 80) and Webb and Powis (2004a, p. 109) confirm that LIS professionals need to develop deep learning in their teaching. Deep and learner centred learning is concerned with pedagogy, which the Dictionary of Information and Library Management (2006) defines as 'the science or profession of teaching' (p. 153). The importance of this is highlighted by Feetham (2006) who writes, 'Increasingly, it is not sufficient

for the librarian to 'train' students in the use of library resources but to have a real understanding of the pedagogy of teaching' (p. 12). Having a knowledge of pedagogy is also viewed as an asset (Kemp, 2006, p. 12; Jacobs, 2008, p. 257), and Biddiscombe (2002, p. 231) argues that subject librarians must understand the learning process in order to be respected. Despite this, there is little empirical research into the pedagogical knowledge of LIS professionals within the UK (Bewick and Corrall, 2010, p. 98). One excellent investigation into the relevance of pedagogy specifically for librarians, is the work of Cook and Sittler (2008), however this appears to be a scant area within the literature.

This lack of research was also proved by Still (1998) who conducted a study into the role and image of the library and librarians in discipline-specific pedagogical journals. Her results showed librarians being invisible within these teaching publications (Still, 1998, p. 229). Pedagogy however is a driving force regarding library design; Rossiter argues that library buildings are being designed to accommodate the changing nature of studying, with more social and group learning spaces being created within libraries (as cited in Shaw, 2013, para. 8), to accommodate the changes regarding information and learning technologies (Sinclair, 2005, p. 505). This suggests that LIS professionals have a knowledge of pedagogy, but from analysing the teaching literature, they appear to be overlooked.

It is a concern for practising academic librarians that they develop their teaching skills. Alcock (2010, para. 4) in her librarianship blog, evaluates whether her work as an academic librarian is that of a teacher, or trainer, and how she feels she is both. Perhaps a blurring of boundaries between training and teaching is the reality. These labels of 'teacher' and 'trainer' are concerned with the self-image of librarians; Butler, a subject librarian, did not enter the profession thinking of herself as a teacher, as she states how, 'something I wasn't expecting was the amount of teaching involved' (as cited in Tickle, 2009, para. 10). The argument that if a librarian wanted to be a teacher, they would have chosen the teaching, and not the librarianship, profession, is common within the literature (Blakeslee, 1998, p. 73). This may go some way in offering an explanation as to why librarians have a difference of opinion about the label they give themselves; there are those who do not wish to be a teacher.

The literature shows a new category of librarian emerging. 'The Blended Librarian' concept was first developed by Bell and Shank in 2004 (Blended Librarian Portal, 2006, para. 1). This was seen as a new form of academic librarianship where instructional design and technology

were integrated into the traditional librarianship role (Bell, as cited in Zenke, 2012, para. 11). This is vital, as Sinclair (2009) writes, 'librarians must assert or reassert their role in the teaching and learning process' (p. 504). The literature suggests that roles are becoming blurred within FE/HE: academics, library staff and IT staff work together within student support (Biddiscombe, 2002, p. 230; Bewick and Corrall, 2010, p. 107). Blended Librarianship is not just about these different professional groups working together, but, as Bell and Shank (2007, p. 18) argue, it is about integrating all these skill sets into the practice of librarianship and the use of these skills to better integrate the library, thereby suggesting that LIS professionals have a role to play in the teaching sphere.

2.5   Should LIS professionals hold formal teaching qualifications?

According to Polger and Okamoto (2010), 'One does not need a teaching degree to be a teacher' (p. 8). However, this must be put into context; to be a teacher in a school, teaching qualifications are essential. Within FE, the legal requirements for teachers to hold teaching qualifications were removed in September 2013, although it is expected that employers in FE will still require their teaching staff to be qualified teachers (Learning and Skills Improvement Service, 2013a, para. 1). In HE, those wishing to be a lecturer are now likely to hold a PhD, with experience of teaching gained whilst studying (Armstrong, 2008, para. 4). As shown in the LIS literature, there is a distinct agreement that librarians should develop their knowledge and skills regarding teaching. Learning how to plan a course, surveying the needs of those who they are to deliver a session to, learning to write objectives, lead discussions and how to set goals and objectives for the class, are some of these necessary skills required (Kilcullen, 1998, pp. 9-10). Peacock (2000a) writes how librarians should be 'empowered with an educational competence and professional confidence equal to that of their academic peers' (p. 2). The literature suggests that teaching librarians lack the knowledge and understanding to aid their IL teaching (Selematsela and du Toit, 2007, p. 119). Burnout, and feelings of stress due to the multiple roles of academic librarians, are noted by Affleck (1996), Sheesley (2001) and Walter (2008, p. 61); these feelings of being overwhelmed therefore lead librarians to acquire higher knowledge to help them overcome these feelings (Albrecht and Baron, 2002, p. 90).

However, LIS professionals do not necessarily need to complete costly teaching qualifications to gain skills and knowledge; they may learn to teach by attending workshops and conferences, reading the literature, and communicating with colleagues (Kilcullen, 1998, p. 7; Webb and Powis, 2004a, p. 185; Kemp, 2006, p. 10). Applying for teaching grants and awards, creating a teaching portfolio, writing a reflective journal and mentoring, are other ways for an LIS professional to develop as a teacher (McGuinness, 2011a, p. 149), as are engaging in group projects with other teaching librarians formally or informally, through collaboration with colleagues on writing articles (Sheesley, 2001, p. 450). This suggests that formal teaching qualifications may not be required, a viewpoint shared by Ruddock (2012, p. 19) who suggests that training opportunities may meet the needs of those who require teaching expertise. Despite this, Ruddock (2012, p. 19) acknowledges the benefits of holding formal teaching qualifications, claiming that they give a grounding in pedagogy, and increased confidence, thereby allowing the LIS professional to provide a better experience for users. Debbi Boden, an academic librarian in the UK, argues that librarians who are teaching should have teaching theory to underpin their knowledge, and that a good way for librarians to gain the necessary pedagogical knowledge is to take the Postgraduate Certificate (PGCert) in Teaching and Learning (as cited in Westwood and Langman, 2010, p. 11).

Teaching librarians write about their experiences, as Patalong (2010) discusses, 'I felt that I was being asked to do a job for which I had no training…I had never wanted to be a teacher' (p. 43), but in her case, she discovered that completing a teaching qualification created new professional opportunities and gave her a renewed enthusiasm for her job. Webb and Powis (2004, p. 184) say that undertaking a teaching qualification is most appropriate when an LIS professional already has some experience of teaching. Peacock (2000a, p. 8) argues that while teaching skills can be developed through formal channels or professional development activities, gaining ability and understanding through 'experience and situational exposure' is relied upon within the profession. This may be because LIS professionals do not have the opportunity to complete formal qualifications, rather than developing by choice through experience. Peer evaluation and reflective practice are also ways for LIS professionals to develop (Kilcullen, 1998, p. 11; Lupton, 2002, p. 75; Webb and Powis, 2004a, pp. 168-171; Patalong, 2010, p. 44; McGuinness, 2011a, pp. 156-158; Snavely and Dewald, 2011).

2.6 Is professional membership of relevant teaching and learning organisations necessary and/or advisable for LIS professionals?

There is a lack of substantial research into this question, a problem discovered by Bennett (2011) when researching American liaison librarians' involvement in non-library professional organisations. Allan (2002) writes, 'the importance of learning and teaching (including e-learning) means that many information workers are now joining other professional groups' (p. 252). The main professional body for LIS in the UK is CILIP, however 'other groups' that Allan (2002, p. 252) mentions include the Institute for Learning (IfL), the Chartered Institute for Personnel and Development (CIPD) and the Association of Learning Technologies (ALT). However, LIS professionals are often overlooked by non-library organisations with regards to membership categories, as there is no specific membership category for librarians within professional bodies (Bennett, 2011, p. 49).

Outside of the traditional LIS professional bodies, the Higher Education Academy (HEA) is one of the more accessible organisations to those librarians who teach. As Webb (2010, slide 11) highlights, membership of the HEA may bring about a dual identity of discipline knowledge, and pedagogy, to teaching librarians, as professional recognition of the teaching and learning role must be based on the knowledge and application of pedagogy, discipline knowledge, and professional ethics and values as a practitioner. HEA membership, and the role it plays for subject librarians, is discussed by Feetham (2006, p. 12), Shephard (2006, p. 54) and Shephard and Matthews (2006, p. 9). The UK Professional Standards Framework (UKPSF) for teaching and supporting learning in HE consists of four Descriptors which aim to be inclusive of all those who work in teaching and support learning within HE (HEA, 2013, para. 3); Descriptor One gives the recognition of an Associate of the Academy (AFHEA), and may be the most appropriate for LIS professionals. The HEA lists learning resource/library staff as typical individuals at this level who support academic provision and who may carry out some teaching (see Appendix 1). Others agree that membership of teaching organisations is valuable; Bennett (2011, p. 50) gives advice to the liaison librarian who has an interest in teaching by recommending membership of organisations focusing on pedagogical issues. By contributing to these organisations, the profile of the teaching librarian can be raised.

A cautionary note is given by Webb (2010) who writes, 'professional recognition via [the] HEA is valuable and provides a development framework but is not a replacement for

professional engagement in LIS' (slide 11), thereby suggesting that library developments should not be overlooked in favour of teaching, but rather, they should both be of concern to the LIS professional. Benefits of joining teaching organisations include an improved current awareness, opportunities to interact with non-librarians, enhanced prestige among teaching staff, and new channels for professional service and scholarly activities (adapted from Bennett, 2011, p. 52). Therefore, the benefits of joining of organisations is self-evident within the limited amount of published literature.

2.7   Do UK library schools prepare graduates for IL roles?

Many studies have been completed regarding the content of library school courses internationally, and more specifically, the lack of teaching skills within the LIS curricula (Patterson and Howell, 1990; Shronrock and Mulder, 1993; Kilcullen,1998; Meulemans and Brown 2001; Partello, 2005; Albrecht and Baron, 2008). As Peacock (2000a) writes, 'many reference librarians enter the workforce unprepared for their teaching role' (p. 3), a view shared by Kemp (2006, p. 10) and Hinchliffe (2008, p. 233), and as Whyte et al (2008) bluntly argue, 'Librarians are not trained to teach' (p. 50). Hall (2009), although viewing the American LIS curriculum, argues how 'library schools are doing their students and the future employers of those students a disservice by failing to recognize user education as a core competency of today's information professional' (p. 48). This view is supported by academic librarians within the UK; one such example is Alcock (2010, para. 7) who argues that library schools should be preparing their graduates for these roles by covering topics such as IL concepts and approaches to teaching (learning styles and pedagogy), as librarians are likely to be teaching or training in some capacity. This is the case within America, as Cook (2008, p. 1) acknowledges the lack of educational theory and pedagogical practices taught at library school within the US.

Within the UK, HE LIS courses are accredited by CILIP. Accredited programmes are assessed using the Professional Knowledge and Skills Base (PKSB) of the profession (CILIP, 2013b, para. 1). Figure 1 shows the elements of the PKSB, of which members of CILIP can use as a self-assessment tool for their professional development, as well as for LIS employers to use as a framework for skills analysis, staff training and development plans (CILIP, 2013c, para. 1). The teaching of IL, and therefore developing teaching skills within LIS professionals, is included in

the 'Literacies and Learning' section of the PKSB. This demonstrates the importance of teaching skills as acknowledged by CILIP.
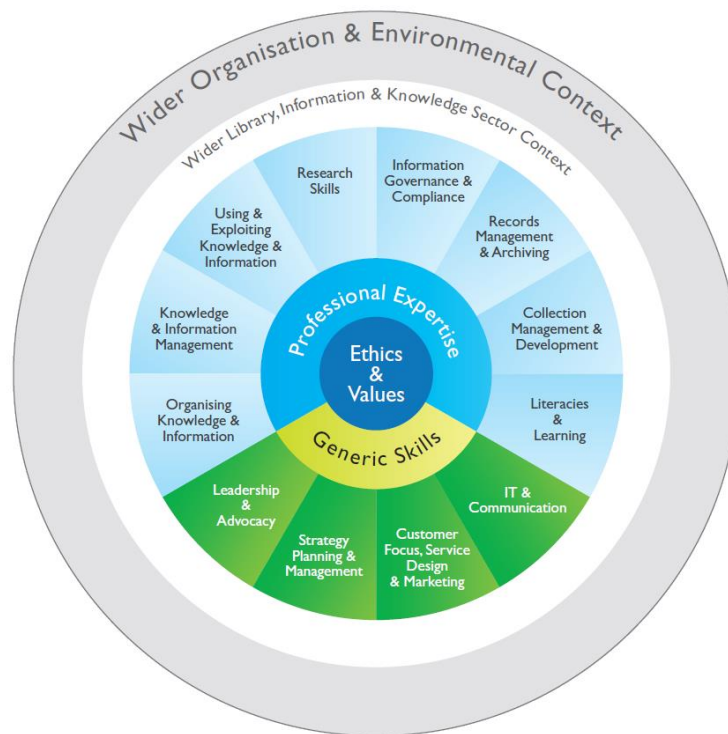
Figure 1: CILIP PKSB which shows the broad range of skills that are required by LIS Professionals (CILIP, n.d., p. 3)

While teaching skills may not be prominent within the LIS curricula, Hall (2009) argues that library school graduates are not finished products, but that 'continuing education and on-the-job training are important components on the professional development of a librarian' (p. 48). One may assume that it would be sufficient for an LIS graduate to take formal teaching qualifications once their library studies are complete, however Hall (2009) believes that 'LIS students should not be placed in the labor market until they know the fundamentals of user instruction' (p. 48), thereby placing the responsibility of gaining teaching experience and/or qualifications not with LIS graduates themselves, but firmly on library schools. One could argue that within the UK if library school courses are assessed using the PKSB, there should be some provision for learning teaching skills. A finding by Bewick and Corrall (2010, p. 100) was that practising librarians supported the inclusion of teacher education into the LIS

curriculum (also noted by Meulemans and Brown, 2001 p. 256), thus suggesting that it does not feature in the content of library school courses.

A further theme emerging from the literature, which Hall (2009, p. 48) briefly touches upon, is employer responsibility. This is explored further by Lupton (2002) who argues that 'if academic libraries are prepared to support IL there must also be a commitment to support and encourage staff in moving from the role of trainer to that of educator' (p. 82). To summarise, Biddiscombe (2002) argues that 'departments of information studies, libraries and professional bodies need to work more closely together to ensure that there is a better structure for continuing professional development' (p. 235). By creating the PKSB, CILIP have begun to recognise the teaching skills of LIS professionals, however the literature suggests that teaching skills should have greater prominence.

2.8   Conclusion

Library schools do not prepare their graduates for teaching roles, nor do professional bodies place enough emphasis on teaching skills. The librarian as teacher is linked to the status of librarians within the institutions they are employed, and how the LIS profession, certainly within previous decades, wished to be disassociated with the negative stereotype of the librarian. Certain authors suggested that this was the cause of librarians wanting to be seen as teachers. The literature suggests a shift within the current decade, where a more positive view is taken, and as a result, practical suggestions within the literature are made as to how LIS professionals can develop themselves in these roles.

Regarding whether LIS professionals are officially teachers or trainers, the literature suggests that a librarian in a FE/HE context is both. According to the literature, the embedding of IL as a for-credit module in academic courses taught by librarians, is the only guaranteed way for LIS professionals to be viewed as teachers, especially while there are numerous of definitions of IL.

The holding of formal teaching qualifications by LIS professionals is viewed as an asset, ensuring they have knowledge and skills to be able to perform in IL roles. However, there are opportunities for these librarians to develop through less formal channels, such as attendance

at workshops and conferences, and liaising with colleagues. Development can also occur by obtaining professional membership of teaching and learning organisations, and the literature suggests that this should be encouraged.

Chapter 3: Methodology

3.1   Introduction

This chapter justifies the chosen research method of content analysis. The limitations of the study are examined, and alternative approaches considered. The samples for analysis, the coding manuals and schedules, and an explanation of the data collected and how analysed, are included.

3.2   Search strategy

To generate a literature search, the key terms and inter-related topics shown in Figure 2, were identified.
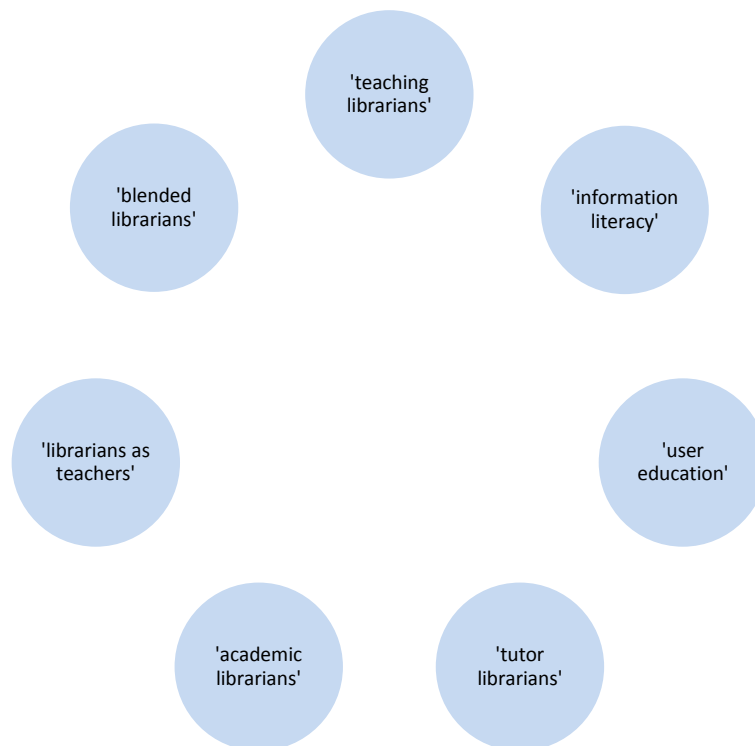
Figure 2: Key terms used to generate an initial literature search

These key terms and topics were used to search library catalogues. When searching, keywords were used in different combinations, such as 'academic librarians AND information literacy'; the Boolean operator of 'AND' enabling a focused search. Key terms were also used to search Google and Google Scholar; journal articles, conference presentations and librarian blogs were discovered. Searches were also carried out in Library and Information Science Abstracts (LISA) and Library, Information Science and Technology Abstracts (LISTA). The index of the Library and Information Research Online Journal was also searched.

A snowballing technique used throughout the research process produced a greater depth of literature. As a result, the central theme was the concept of the 'teaching librarian' or 'librarians as teachers'. These concepts were explored through the following four subthemes: Are LIS professionals trainers or teachers? Should LIS professionals hold formal teaching qualifications? Is professional membership of relevant teaching and learning organisations necessary and/or advisable for LIS professionals? Do UK library schools prepare graduates for IL roles?

Recommendations by staff from the Department of Information Studies, Aberystwyth University, and the university's online repository CADAIR, were used to find previous dissertations that utilised content analysis, as this was deemed to be a suitable research method for this investigation.

3.3   Chosen methodology: content analysis

Content analysis was chosen so that LIS course content within the UK, and job descriptions and person specifications, could be analysed to answer the research objective of whether the skills taught on LIS programmes match the expectations of employers for job roles requiring an element of IL teaching and user education. Influencing the use of content analysis within this study was the work of Payne (2009), who used this as a way to compare Information Management course curricula and Information Management job advertisements. Content analysis was also chosen as it is a common approach to documentary analysis, as Krippendorff (2004) explains, it is 'a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use' (p. 18).

To locate this study within a body of research, it was necessary to understand previous research, apart from Payne (2009), which completed a content analysis of the skills and qualifications required for LIS professionals. Previous studies include Brewerton (2011), Cutting (2002), Heimer (2002) and Orme (2008). Sproles, Johnson and Farison (2008) completed a study into how widespread the inclusion of IL instruction was in masters LIS courses, however they studied America, not the UK. Albrecht and Baron (2002) also used content analysis to determine the content of LIS courses and job advertisements, but this too was concerned with America.

The advantages of using content analysis, as noted by Berg (2009, p. 364), Robson (2011, p. 356) and Bryman (2012, p. 304), include:

- It is a transparent research method as the coding scheme and sampling can be replicated as the data is in a permanent form, therefore allowing re-analysis, or follow-up studies. This makes content analysis an objective method.
- It is an unobtrusive method (as it does not involve the researcher interacting with any participants). It is therefore a non-reactive method.
- It is a low-cost form of longitudinal analysis with regards to this study, as a run of job descriptions and person specifications were available.

However, there are certain drawbacks associated with the use of content analysis, and these, again noted by Robson (2011, p. 356) and Bryman (2012, p. 306), include the following:

- A content analysis is only as good as the documents that are used.
- Documents that are available may be limited.
- It is impossible to completely eradicate the power of interpretation when coding.

The constraints of time and access to resources made content analysis the most appropriate research method to adopt for this study.

3.3.1   Alternative methods

Alternative methods could have been questionnaires or interviews with those working in a teaching librarian role in order to gauge whether they viewed themselves as teachers, and to

ascertain their qualifications, skills and experience, and the main duties they performed. A case study of the researcher's workplace, concerned with the teaching librarian function, was also considered, however this was felt to be too limiting. A focus group, where those LIS professionals who had an IL teaching function were bought together, could have been used, but as this study is concerned with an objective overview, and not the subjective opinions of individuals as to whether librarians are teachers, content analysis was felt a more practical choice (Payne, 2009, p. 28).

3.4 Samples for analysis and their limitations

The samples used were non-probability samples, the type of which were convenience samples. They were non-probability samples because the job descriptions and person specifications were not selected randomly, as those that had an IL role were selected over those that did not have this role, thereby producing a sampling bias. The justification for using this selection criteria was concerned with the overall research question of analysing the skills and qualifications required by LIS professionals in IL job roles, hence an emphasis was placed on IL duties. The LIS courses chosen were also non-probability samples. They were not selected randomly but chosen because they were offered at UK universities, and could help to answer the research question of 'Do UK library schools prepare graduates for IL roles?'.

The population sample for the job descriptions and person specifications were those in FE/HE library contexts, as this was the LIS sector that the researcher worked in. It was a convenience sample as job descriptions and person specifications analysed were those available by virtue of their accessibility (i.e. those jobs that were currently being advertised). Before the study began, the sample size was unknown, as it was impossible to know how many jobs would be advertised that met the specified criteria of having an IL and user education duty. It was therefore impossible to generalise the findings as it was hard to determine how representative the sample obtained was of the population. However, it was still a useful form of sampling, as even with regards to probability sampling, findings can only be generalised to the population that the samples are taken from.

3.4.1 Job description and person specification search

The research was concerned with those job descriptions and person specifications for LIS professionals working in FE/HE contexts, whose remit included that of IL skills training. These were considered relevant to answer the research questions of 'Should LIS professionals hold formal teaching qualifications?' and 'Is professional membership of relevant teaching and learning organisations necessary and/or advisable for LIS professionals?'

Two sources of job advertisements were used; LISJOBNET.com, the official recruitment site of CILIP, and FEjobs.com for those positions within FE/HE Colleges. These online recruitment websites were chosen due to the advantages, as noted by Payne (2009), of how 'they are updated daily…the job details are instantly accessible as soon as they are loaded onto the system; and that relevant advertisements can be easily identified through keyword searching' (p. 32). A disadvantage, noted by Payne (2009, p. 32), is that they had to be consulted on a regular basis to ensure that no advertised jobs that matched the criteria were missed, thereby ensuring all relevant jobs were considered. Once job advertisements for roles that had an IL skills training element had been identified, the job descriptions and person specifications were obtained, in all cases from LISJOBNET.com these were gathered from the employer's recruitment pages on their website. With regards to FEjobs.com, some advertisements contained the job descriptions and person specifications as attachments to the advertisement, whilst in other cases they had to be sought from the employer's recruitment webpages.

3.4.2 Selection of appropriate job description and person specification samples

To ensure that all relevant jobs were considered, the above sources were consulted once a week between April-December 2013. This time frame was chosen due to the researcher's time constraints.

One problem encountered by checking the two online sources for job advertisements was that some jobs had a long closing date; this meant that careful attention had to be paid as to which jobs had already been included in the study, as it would have been possible to count the same job several times within the study.

3.4.3 Course search

With regards to the research question of 'Do UK library schools prepare graduates for IL roles?', the literature suggested a lack of IL concepts and teaching skills within LIS courses. To prove or disprove the literature, it was decided that UK HE courses in LIS had to be analysed. A search for these courses was conducted using the CILIP website (for those courses that were accredited by CILIP), as here could be found a list of those institutions that had a department of information studies, or those with a department of a similar nature. Course searches were also performed on the websites of relevant institutions, to ascertain non-accredited CILIP courses.

3.4.4 Selection of an appropriate course sample

To limit the data, only single-honours courses that were titled 'Information and Library Studies/Management', 'Information Management' or 'Librarianship' were considered. Other courses such as 'Information Systems', 'Health Informatics' or 'Digital Library Management' were excluded, as these were felt to be for more specific roles and sectors. Higher research courses were also omitted.

As the research aim was concerned with the current situation, only those courses running in the academic year 2014-2015 were considered. In the case of those courses that were of a longer duration than this (such as part-time and distance learning courses), the modules that were available in 2014-2015 were considered. A table of the courses analysed can be found in Appendix 2.

The further particulars of the courses considered (such as the modules available) were obtained from the websites of the relevant institutions. A letter was also sent, via email, to all the relevant academic departments, or the relevant admissions tutors (where their individual names were given) in order to obtain specific information regarding the IL content of the courses, and whether these courses also focused on equipping their students with teaching and training skills. A copy of this letter can be seen in Appendix 3.

3.5   Content analysis: coding schedules and manuals

To be consistent regarding data analysis, coding schedules and manuals were used; these were adapted from Payne (2009). Two coding manuals for the study were created; one for the job descriptions and person specifications and another for the courses, as they contained slightly different information, although both coding manuals did contain similar categories to allow for results comparison (Payne, 2009, p. 35).

A coding schedule is a form where all the data relating to an item being coded is entered (Bryman, 2012, p. 298). One form was used for every item that was coded; these were completed for both the courses and the job descriptions and person specifications. A coding manual is a statement of instructions to the coders that includes all the possible categories for each dimension being coded. The coding manuals used in this study provided a list of all the dimensions and the different categories subsumed under each dimension (Bryman, 2012, p. 299). Also, as Bryman (2012) highlights, 'The coding manual is crucial because it provides coders with complete listings of all categories for each dimension they are coding and guidance about how to interpret the dimensions' (p. 299). A problem, noted by Bryman (2012, p. 299), is one of intra-coder reliability. Bryman (2012) defines this as 'the degree to which an individual differs over time in the coding of an item' (p. 712). As a result, there were a number of pitfalls regarding coding that needed to be reduced. These included the necessity to provide clear instructions so that when coding there was no discretion on the part of the coder, but the coder was clear about how to interpret each dimension.

The coding manuals contain similar headings to those used by Payne (2009); these include 'Preliminaries', 'Job Title and Sector', Skills, Experience and Knowledge' and 'Duties of Post' for the Job Description and Person Specification Coding Manual. Under these headings, the categories were altered to give a more focused approach to the research aim and these included changing 'Specific Sector Employment' to 'Specific Educational Sector Experience' and adding categories such as 'Teaching Qualifications.' The categories of 'Professional Status', 'Specialist Subject Knowledge' and 'Promotion/Marketing' were also included from Payne (2009). With regards to the Course Coding Manual, the headings used by Payne (2009) were replicated; these included 'Course Preliminaries', 'Course Structure' and 'Topics & Subjects Covered by Module'. The full version of the CILIP PKSB (CILIP, 2012a) as identified within the literature review, was also used to create categories within the coding manuals, as the

Professional Expertise section of 'Literacies and Learning' within the PKSB can be broken down into further headings concerned with relevant knowledge and skills. These headings, included within both the coding manuals, were the following:

- Information Literacy (IL), which was also combined with the heading of 'Supporting users' for the purposes of this study
- Digital Literacy (which for the purposes of this study was concerned with the experience of using digital technology tools and information and learning technologies (ILT), along with blended librarianship skills, which were identified within the literature review)
- Frameworks and curricula for education and training
- Teaching and training skills
- Virtual Learning Environments (VLEs)

Two categories contained within the full CILIP PKSB (CILIP, 2012a, pp. 28-30) were omitted; 'Reader Literacy and Reader Development', as it was felt that this was a separate theme altogether, and 'Writing, numeracy and creativity', as this was concerned with more generic skills.

As recommended by Robson (2011, p. 405) a pilot study was conducted for both manuals. Bryman (2012) writes, 'Piloting will help to identify difficulties in applying the coding scheme, such as uncertainty about which category to employ when considering a certain dimension or discovering that no code is available to cover a particular case' (p. 304). By conducting a pilot study, these problems were encountered, and rectified. Within the job description and person specification coding manual, the categories of 'Previous work experience within an information related role' and 'Experience of working with young people' were added. This was because these requirements were frequently seen within the job descriptions and person specifications that were analysed as part of the pilot. The course coding manual was also heavily revised after piloting, as the level of detail available regarding module and course content varied greatly, and so the manual had to be simplified by way of 'Yes/No' options.

Piloting the coding manuals also ensured that the categories were mutually exclusive, and that there was no overlap in the categories supplied for each dimension (Bryman, 2012, p. 303). As Weber (1990) argues, 'Testing not only reveals ambiguities in the rules, but also often

leads to insights suggesting revisions of the classification scheme' (p. 23). As a result, more detailed descriptions were added to the categories for clarification; this was especially true regarding the category of 'Information Literacy (IL),' which had been concerned with the theory and research of IL, and not the supporting of users (which had its own category, as is the case within the PKSB). However, as there was an overlap between these two categories they were merged to give the one category of 'IL & supporting users'.

As the sample sizes for both the coding manuals were relatively small, all those considered in the pilot study were again re-analysed for the final study.

3.5.1 Job description and person specification data collected

Data from the job descriptions and person specifications were collected in the following areas (the full coding manual can be found in Appendix 4, and a sample coded job description and person specification can be found in Appendix 5, in order to illustrate the coding manual in use):

Job Description and Person Specification Preliminaries: The source of the initial job advert (which subsequently led to the relevant job description and person specification being located) was recorded.

Job Title & Sector: These were recorded, in order to use for comparison purposes for data analysis.

Skills, Experience & Knowledge: Data regarding the qualifications for each post were recorded and whether these were essential or desirable. The inclusion of the coding of teaching qualifications was a priority, to aid answering the research question of 'Should LIS professionals hold formal teaching qualifications?' 'Professional Status' was also recorded to aid the investigation into the research question of whether professional membership of relevant teaching and learning organisations is necessary and/or advisable for LIS professionals. 'Promotion/Marketing' was included, as the literature highlighted how teaching librarians have a marketing function. 'Specialist subject knowledge' was also recorded, along with the knowledge of specific software (especially the knowledge of educational software), as the literature highlighted the 'Blended Librarian'. The majority of the remaining categories were

taken from the full CILIP PKSB (CILIP, 2012a, pp. 28-30), as discussed above (Section 3.5). Within the category of 'Teaching and training skills', the inclusion of a knowledge of pedagogical theories, and the experience of delivering workshops and one-to-one user support, were added for clarification.

Duties of Post: The majority of the categories were taken from the full CILIP PKSB (CILIP, 2012a, pp. 28-30), as discussed above (Section 3.5). Within the category of 'Teaching and training skills', the inclusion of the provision of workshops, one-to-one student support, and producing schemes of work and lesson plans, were deemed important as these are duties that teaching librarians may be asked to perform. The addition of the 'Delivering induction sessions', 'Production of appropriate learning materials' and 'Internal liaison with teaching colleagues/faculties/departments' categories were necessary as these are aspects of a teaching librarian's duties. The inclusion of 'Keeping abreast of new developments' and 'Committed to continuing professional development' were also deemed appropriate, as the literature highlighted how these channels were ways that the teaching librarian could develop. The frequency by which the duties of the post were stated, were also recorded as an indicator of the importance of that duty to the role (Payne, 2009, p. 39).

3.5.2 Course data collected

Data from the LIS courses included within this study were collected in the following areas (see Appendix 6):

Course Preliminaries: The name of the university, department, course title and level, were collected, along with whether the course was a specific IL programme and if it was accredited by CILIP.

General Course Details & Structure: The categories of 'Total number of core modules considered' and 'Total number of option modules considered' were included due to the amount of data that was available for coding purposes; some modules were not considered as only module titles, and no details, were provided. The categories of 'Specific module on IL', 'Specific module content on academic library environments' and 'Specific module on library

services for young people' were added to aid data comparison with regards to the research question of 'Do UK Library Schools prepare graduates for IL roles?'.

Topics & Subjects Covered by other Modules: The number of modules covering the topics and subjects identified within the coding manual were recorded, with 'IL & supporting users (within non-IL specific modules)' featured as a category. It was necessary to determine whether IL did feature within courses, even though there may not have been an IL-specific module. As Payne (2009) noted, 'If a module covered a number of different topics or subjects, data was recorded for every topic/subject category the module covered' (p. 37); this was also adopted for this study. The majority of the remaining categories were taken from the full CILIP PKSB (CILIP, 2012a, pp. 28-30), as discussed above (Section 3.5).

Additional Information: This was added after the pilot study was carried out; with regards to the category of 'Information on website and/or in course literature (e.g. prospectus)', this was coded according to whether there was 'Summary data' (which consisted of a brief paragraph of information about the module), or 'Detailed data' available about the course (which consisted of the aims of the module, learning outcomes, assessment details and indicative module content). An example of these two types of available details is shown in Appendix 7.

3.6   Data analysis

Analysis of LIS course content, and job descriptions and person specifications, began simultaneously, with graphs created using Microsoft Excel. Nominal, or categorical variables, were used as these are variables that comprise categories that cannot be ordered by rank (Bryman, 2012, p. 713). The analysis of this data is similar to that of Payne (2009), as univariate analysis, the analysis of one variable at a time (Bryman, 2012, p. 337), was presented by frequency tables, bar charts and pie charts. Bivariate analysis, which as Bryman (2012) defines 'is concerned with the analysis of two variables at a time in order to uncover whether or not the two variables are related' (p. 339), was also completed using graphs.

3.7 Ethical Considerations

The following ethics policies were adhered to:

- Aberystwyth University's Department of Information Studies Ethics Policy (Department of Information Studies, Aberystwyth University, 2010), which is based on the code of professional practice set out by the British Sociological Association (2002)

- CILIP's Ethical Principles for Library and Information Professionals (2004)

- CILIP's Code of Professional Practice for Library and Information Professionals (2012b)

3.8 Summary

This research used content analysis to determine what skills and qualifications are required for IL roles within FE/HE library contexts, and whether LIS courses within the UK are preparing graduates for these roles. The data was then analysed. The results and discussion follow this chapter.

Chapter 4: Results & Discussion

4.1   Introduction

This chapter includes the results and discusses them in relation to the literature review.

4.2   Content analysis: descriptive data & its analysis

4.2.1 Job descriptions and person specifications sample

The total number of job descriptions and person specifications analysed, and the employment sector these represented, are shown in Table 5. The total number analysed was 91, with 33 from the FE/HE College sector and 58 from the HE (University) sector; the percentages for these figures are given in Table 5.

Employment Sector	Total number of job descriptions and person specifications analysed	%
FE/HE College	33	36
HE (University)	58	64
Total	91	100

Table 5: Job descriptions and person specifications sample

The source of these job adverts, which led to obtaining the specific job description and person specification, are in Table 6. As shown, the majority of adverts were listed on LISJOBNET.com (68%), with only 32% listed on FEjobs.com. The researcher's workplace (an FE/HE College) advertise job vacancies internally or on the College's main website to reduce recruitment costs. As a result, there is a possibility that other jobs that were advertised were excluded from the study. This indicates that the results give a snapshot, rather than an accurate portrayal, of IL roles.

Source of job advert	Number of job adverts from this source	%
LISJOBNET.com	62	68
FEjobs.com	29	32
Total	**91**	100

Table 6: The number of job advertisements identified by source

<u>**4.2.2 LIS courses sample**</u>

In total, 17 courses were included (see Methodology); the level of these is shown in Table 7. There was a lack of courses offered at undergraduate level, suggesting that the market and demand for courses is postgraduate level (see Appendix 2).

Course level	Total number of courses
Undergraduate	1
Graduate Certificate	1
Postgraduate	15
Overall Total	**17**

Table 7: LIS courses sample

Only one course was not accredited by CILIP, and as expected, this was the Graduate Certificate, as CILIP only accredit degree level courses (see Table 8).

CILIP Accreditation			
Course level	**Yes**	**No**	**Pending**
Undergraduate	1	0	0
Graduate Certificate	0	1	0
Postgraduate	14	0	1
Overall Totals	**15**	**1**	**1**

Table 8: CILIP accreditation of LIS courses included in the study

Within the courses, a total of 167 modules were included. Table 9 shows the numbers of core, or option, modules. All core modules for the 17 courses were included in the study, however, obtaining information about option modules was difficult, as either these modules were not listed or only their titles were given; where this was the case they were not included.

Modules	Total
Core Modules	107
Option Modules	60
Overall Total	**167**

Table 9: The number of core and option modules included in the study

4.2.3   Response rate

The response rate to the email sent to relevant institutions/admissions tutors to obtain course information (see Methodology), was poor. The 17 courses were taught by nine institutions which were all contacted. Only two replies were received, these are referred to as 'Reply' followed by a number. The course details available from websites/prospectuses varied greatly, and in one case, within an institution's course details; certain modules had summary information, while other modules were more detailed and contained learning outcomes and indicative module content. In view of this, courses were coded as to whether they consisted of detailed or summary data, the results of which are in Table 10. As the data for these two particular courses at this one institution varied, they were coded as having both detailed, and summary data, and therefore the overall total is 19, rather than the expected 17.

Data type	Number of course details
Detailed data	7
Summary data	12
Overall Total	**19**

Table 10: Available information regarding course details

4.3   Findings

The following sections are organised using the research questions identified in Chapter 1.

4.3.1 To what extent do LIS professionals teach?: Can job titles answer this?

The job titles add to the arguments that LIS professionals are student advisors (SCONUL, 2013, para. 12), as student support was reflected in titles such as 'Library and Learning Support Manager' and 'Student Support Librarian'. The results of this coding are shown in Figure 3. There were no recorded jobs with the title of 'Tutor Librarian' (Wright, 1960, p. 190; Pugh, 1960, p. 206), although the title 'Tutor' is found in titles such as 'Academic Skills Tutor Librarian' and 'Learning Centre Tutor', therefore suggesting that some LIS professionals are also teaching. The most common job title was 'Subject Librarian' (12 jobs), followed by 'Academic Liaison Librarian' (9 jobs). This shows that although the traditional job titles are still used, overall there is a more wide-ranging array of titles, making generalisations difficult. Also, no jobs contained IL within their titles, therefore attempting to search for a job which contains IL duties by title, is problematic.
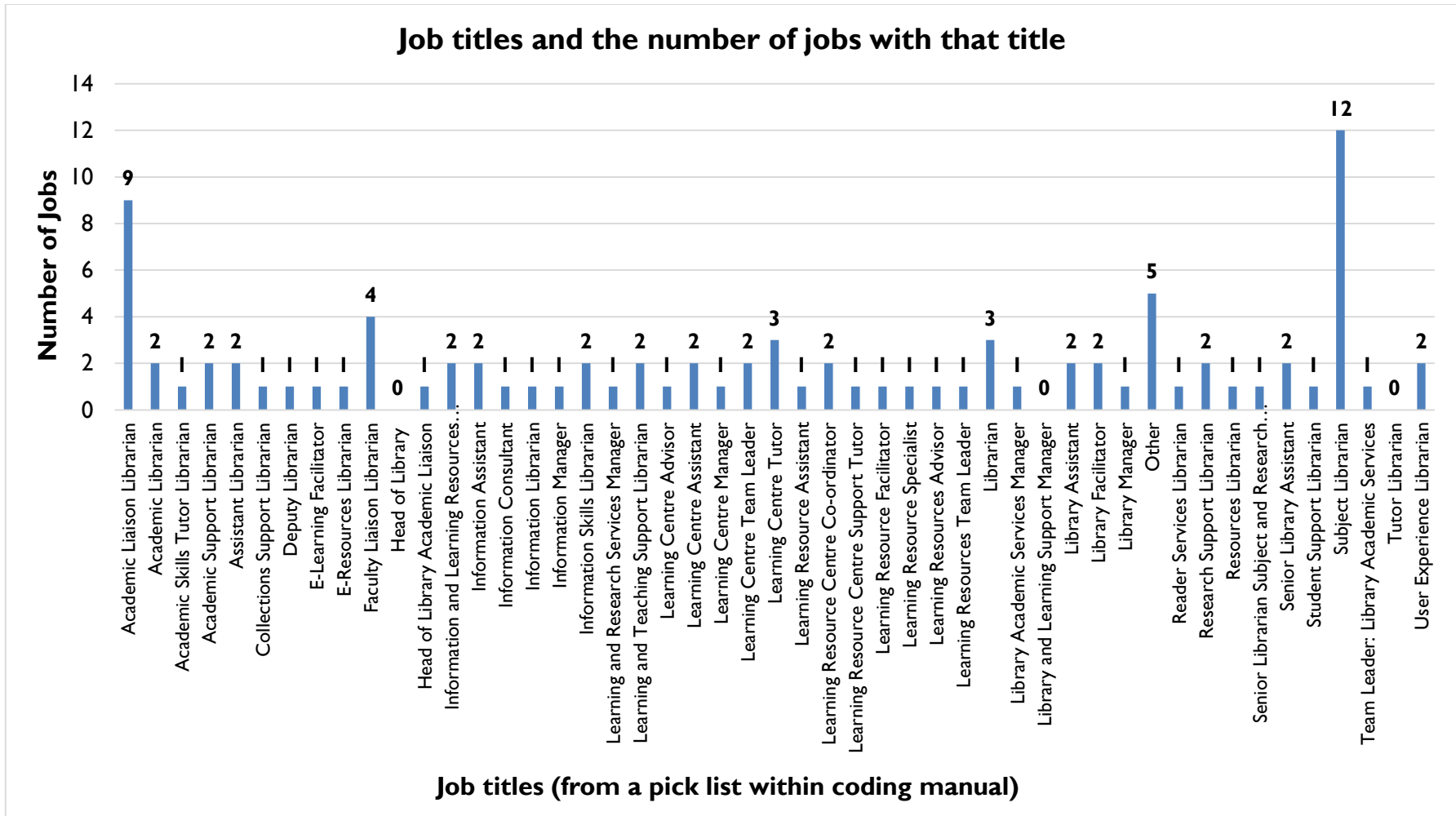
Figure 3: Graph to show job titles and the number of jobs with that title

4.3.1.1 To what extent do LIS professionals teach?: Skills, experience & knowledge and the identified duties within IL job roles

The results of the skills, experience and knowledge are shown in Table 11, and the duties of post in Table 12. The frequency of duty refers to how many times the duty was mentioned in a job description. This was counted so that the top attributes of jobs could be determined.

The debate within the literature gave conflicting viewpoints; many argued that LIS professionals are teachers (Rader, 1997; Court, 2001; Hall, 2009), while others argued that librarians are teachers and trainers (Lupton, 2002; Alcock, 2010, para. 4; Pullinger and Schneider, 2010a). In view of this, teaching and training skills were combined and analysed within the duties of the jobs and the prior skills, experience and knowledge considered (64% of jobs recognised this). One argument was whether IL teaching was embedded into the curriculum (Pullinger and Schneider, 2010b, slide 4). This was not analysed as this information was not contained within job descriptions, thereby producing a gap within the results.

Skills, Experience & Knowledge, and the breakdown of these regarding Essential & Desirable						
Skills, Experience & Knowledge	Number of Jobs	% (*N*=91)	Essential	Essential as % (essential no. of 91)	Desirable	Desirable as % (desirable no. of 91)
Previous work experience within an information related role	80	88	75	82	5	6
IL & supporting users	59	65	56	62	3	3
Teaching and training skills	58	64	51	56	7	8
Digital Literacy	51	56	37	41	14	15
Frameworks and curricula for education and training	36	40	25	27	11	12

Specific software knowledge	36	40	29	32	7	8
Virtual Learning Environments (VLEs)	25	27	10	11	15	16
Specialist subject knowledge	22	24	7	8	15	16
Promotion/ Marketing	15	16	13	14	2	2
Experience of working with young people	14	15	6	7	8	9
Delivering induction sessions	3	3	3	3	0	0

Table 11: Skills, experience & knowledge (FE/HE College & HE (University) results combined) and the breakdown of these regarding essential & desirable

Duties of Post, arranged by highest %			
Duties of post	Number of jobs	% (*N*=91)	Frequency of duty (number is combined from all jobs)
IL & supporting users	91	100	198
Internal liaison with teaching colleagues/faculties/departments	82	90	260
Teaching and training skills	79	87	190
Digital Literacy	69	76	123
Committed to continuing professional development	67	74	68
Promotion/Marketing	62	68	93
Keeping abreast of new developments	53	58	56
Production of appropriate learning materials	39	43	44
Delivering induction sessions	38	42	38
Virtual Learning Environments (VLEs)	37	41	44

Table 12: Duties of post, arranged by highest %

Although 87% of jobs asked for teaching and training skills within the duties of post, internal liaison with teaching colleagues/faculties/departments was higher at 90%. The most common duty was concerned with IL and supporting users; this was to be expected as the criteria for the selection of job descriptions was that they had an IL role, hence the number of jobs with this duty being 100%. Although IL and supporting users was present in all, the highest frequency of duty was internal liaison at 260 occurrences. The literature suggested that LIS professionals wanted faculty status (De Priest, 1973); the categorisation of LIS professionals more recently appears to be whether they belong to a service department (administration or support staff) or an academic discipline (teaching staff) (Mitchell and Morton, 1992, p. 385; StevenB, 2010, para. 3). The results do not answer this, however, the large number of occurrences of internal liaison suggests that LIS professionals spend a large proportion of their time dealing with teaching colleagues, and so strengthen the case for the 'embedded librarian'. Whether LIS professionals are truly integrated into the institutions they are employed in (Dewey, 2004), remains unanswered.

The duties of these posts prove that the stereotypes surrounding LIS professionals are unfounded; they are more than book-stampers (Walter, 2008, p. 63). Marketing was identified within the literature that LIS professionals with an IL role engage in (Ardis, 2005a; Kenney, 2008, pp. 3-4; Walsh, 2011, p. 7). As can be seen, 68% of jobs contained some form of promotion/marketing and so this supports the literature. However, where promotion/marketing were concerned with prior skills, experience and knowledge, the figure was only 16%, suggesting it is of low importance to employers as to whether employees have done this previously.

The literature highlighted the emergence of the 'Blended Librarian' (Blended Librarianship Portal, 2006). Digital Literacy duties were analysed and found to be contained within 76% of the duties, with a frequency of 123. Prior skills, knowledge and experience of digital literacy were present in 56% of the person specifications analysed. This highlights that instructional technology is being integrated into LIS roles (Bell, as cited in Zenke, 2012, para. 11). The use and knowledge of VLEs was the least mentioned duty, at 41%. The frequency of this was 44 times, the same number as the production of appropriate learning materials, which was mentioned slightly more than VLEs as it was present within 43% of the jobs included. With regards to delivering induction sessions, 42% of jobs listed this. However, only 3% of the

person specifications asked for prior skills, knowledge and experience of delivering these induction sessions, suggesting that they are not a major concern for employers.

Specialist subject knowledge was asked for within 40% of the jobs studied. The literature historically argued that teaching librarians also taught academic subjects (Pugh, 1971, p. 206). Although the results do not necessarily prove or disprove that LIS professionals are teaching a subject, it highlights how for some roles, a wider knowledge base than just LIS is required. This confirms the literature that argued how librarians were multi-skilled (Budd, 1982, p. 1946; De Priest, 1973, pp. 151-152), and still are today.

Commitment to continuing professional development was present within 74% of the job descriptions. Within these, the form of this was not specified, although it could include attendance at workshops and conferences (Kilcullen, 1998, p. 7; Webb and Powis, 2004a, p. 185; Kemp, 2006, p. 10). The duty of keeping abreast of new developments was present in 58% of jobs, with a frequency of 56 occurrences, and the results show that employers expect their staff to be familiar with new developments.

The highest experience asked for was previous work within an information related role, with it appearing in 88% of jobs, and 82% of these being essential. The breakdown of whether specific educational sector experience was necessary is displayed in Table 13, and the percentages of these are shown in Figure 4. The exact educational environment not specified came out as the highest category with a figure of 40%. Experience of working with young people was only present within 15% of all jobs. Taken overall therefore, 77 jobs (85%) said it was either essential or desirable that some form of educational experience was held by employees.

Specific educational sector experience	Number of jobs	% (*N*=91)	Essential	Essential as %	Desirable	Desirable as %
FE/HE College	9	10	8	9	1	1
HE (University)	32	35	26	29	6	7
Exact educational environment/ setting not specified	36	40	25	27	11	12
Not required	14 (15%)					

Table 13: Specific educational sector experience
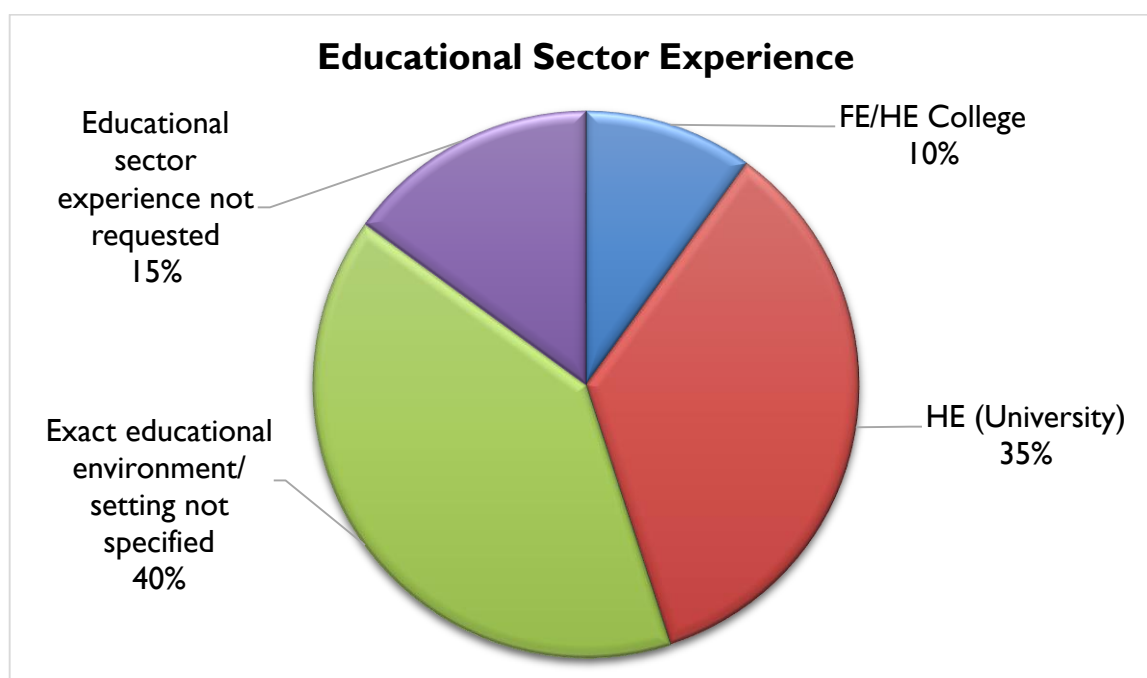
Figure 4: Pie chart to show educational sector experience

4.3.2 Should LIS professionals hold teaching qualifications?

The literature highlighted that those teaching within FE no longer need to hold a teaching qualification (Learning and Skills Improvement Service, 2013a, para. 1). Where LIS professionals are concerned, the literature suggested that it was an advantage to hold these qualifications (Peacock, 2000a, p. 8; Ruddock, 2012, p. 19; Selematsela and du Toit, 2007, p. 119). Figure 4 shows the results for whether teaching qualifications were asked for by employers. Those LIS professionals who find themselves employed in FE/HE College environments may be advised to complete such qualifications, as 16 jobs (48%) within this sector said it was either essential or desirable that prospective employees had completed them. Caution however must be taken, as 17 jobs (52%) did not mention teaching qualifications, implying that employers within this sector are not concerned whether LIS staff are qualified teachers. To produce a solid conclusion for the FE/HE College sector, a larger sample would need to be analysed, to see whether a greater percentage would prefer prospective employees to hold teaching qualifications.
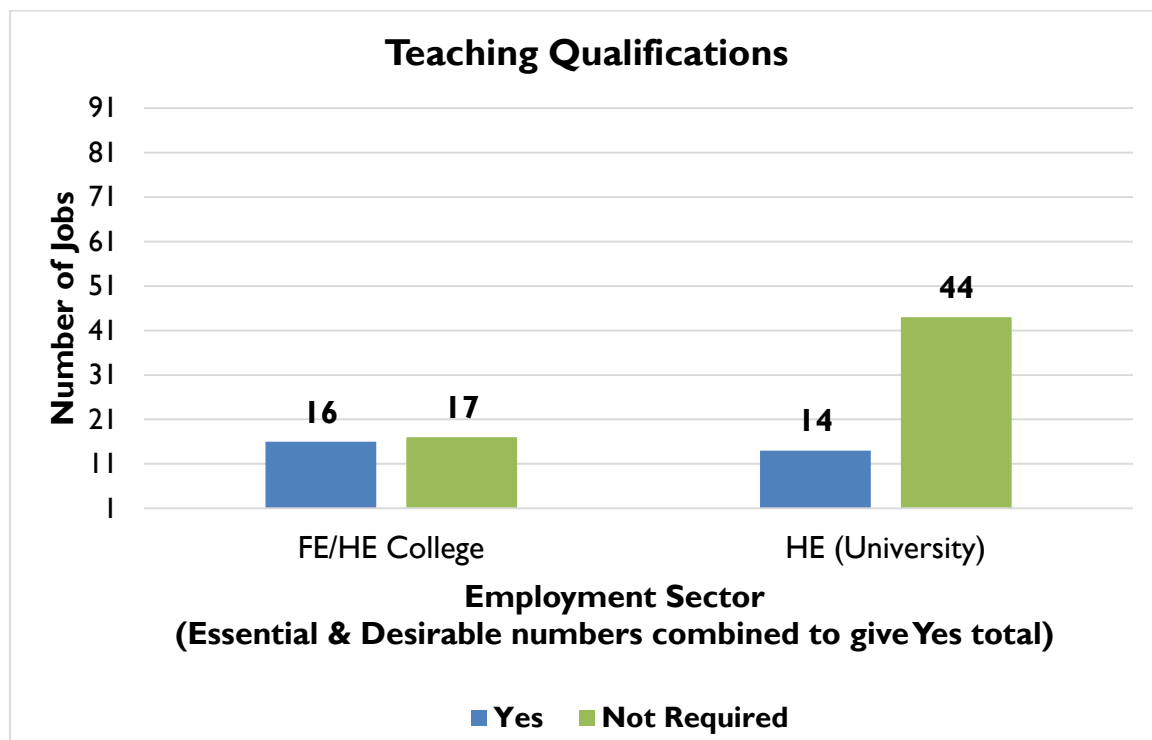
Figure 5: Graph to show whether teaching qualifications were asked for by the specified employment sectors

Within HE (University) LIS environments, the split between jobs that asked for a teaching qualification (either essential or desirable) was much more defined; only 14 jobs (24%) asked for a teaching qualification, compared to 44 jobs (76%) that did not mention these. This suggests that HE (University) environments are not placing an emphasis on these qualifications. The fact that 64% of person specifications across both sectors asked for prior skills, experience and knowledge of teaching and training skills, suggests that it would be beneficial for LIS professionals to undertake some form of teacher training (Ruddock, 2012, p. 19). Prior skills, experience and knowledge of frameworks and curricula for education and training were present within 40% of person specifications for both sectors, strengthening the case for LIS professionals to develop teaching skills.
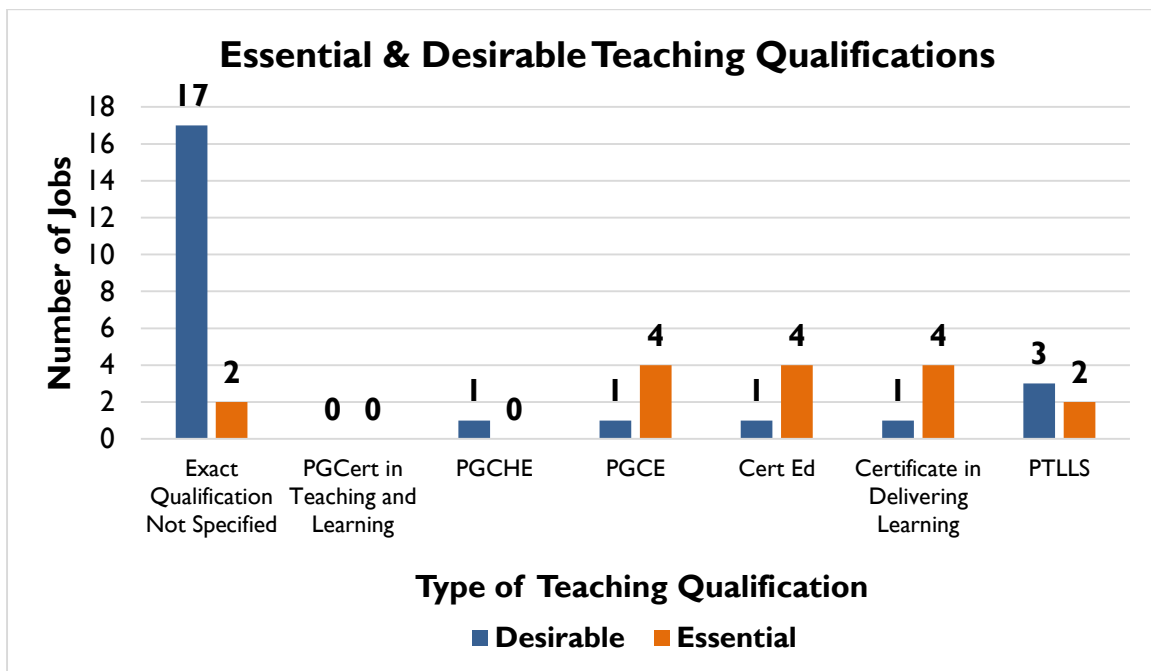
Figure 6: Breakdown of the specific teaching qualifications asked for by employers (FE/HE College and HE (University) combined) and whether these were essential or desirable

Figure 6 shows the breakdown of the specific teaching qualifications that were specified within person specifications for both FE/HE. Based on these results, the advice to LIS professionals is that employers, at present, are not concerned with the exact teaching qualification obtained, as this category had the highest number at 17. This was also at desirable level, therefore suggesting that employers are not regarding teaching qualifications highly.

4.3.2.1 Are other qualifications more important?

Other qualifications were analysed to determine whether LIS employers place more emphasis on general education, IT and LIS qualifications, as opposed to these teaching qualifications. All qualifications that were listed within person specifications were recorded. The breakdown of these results can be seen in Tables 14 -16, with Figure 7 showing these results combined. Overwhemingly, 59 jobs asked for an undergraduate degree in any subject (65%), while 38 jobs (42%) highlighted a postgraduate degree in LIS as either essential or desirable. Comparing these results, it appears that being educated to degree level, and having an LIS qualification, is more frequently asked for by employers than teaching qualifications, and therefore, LIS professionals with an interest in IL roles would be advised to complete such qualifications as a priority. IT qualifications are not asked for as frequently, as 68 jobs (75%) did not mention them, suggesting that employers are not placing emphasis on these.

General education level	Essential	Desirable	Total	Total as % of 91
GCSEs	7	0	7	8
A Levels	4	0	4	4
NVQ/Diploma (subject not specified)	2	0	2	2
Undergraduate degree (subject not specified)	58	1	59	65
Postgraduate degree (subject not specified)	3	1	4	4
PhD (subject not specified)	1	0	1	1
Not required	18 (20%)			

Table 14: General education level

IT qualification	Essential	Desirable	Total	Total as % of 91
ECDL	11	4	15	16
Exact IT qualification not specified	5	3	8	9
Not required	68 (75%)			

Table 15: IT qualifications

LIS Qualification	Essential	Desirable	Total	Total as a % of 91
Postgraduate degree in LIS	34	4	38	42
Exact LIS qualification not specified	23	5	28	31
Undergraduate degree in LIS	15	1	16	18
NVQ/Diploma in LIS	1	2	3	3
Not required	16 (18%)			

Table 16: LIS qualifications

Requested Qualifications
(All that were requested were recorded)
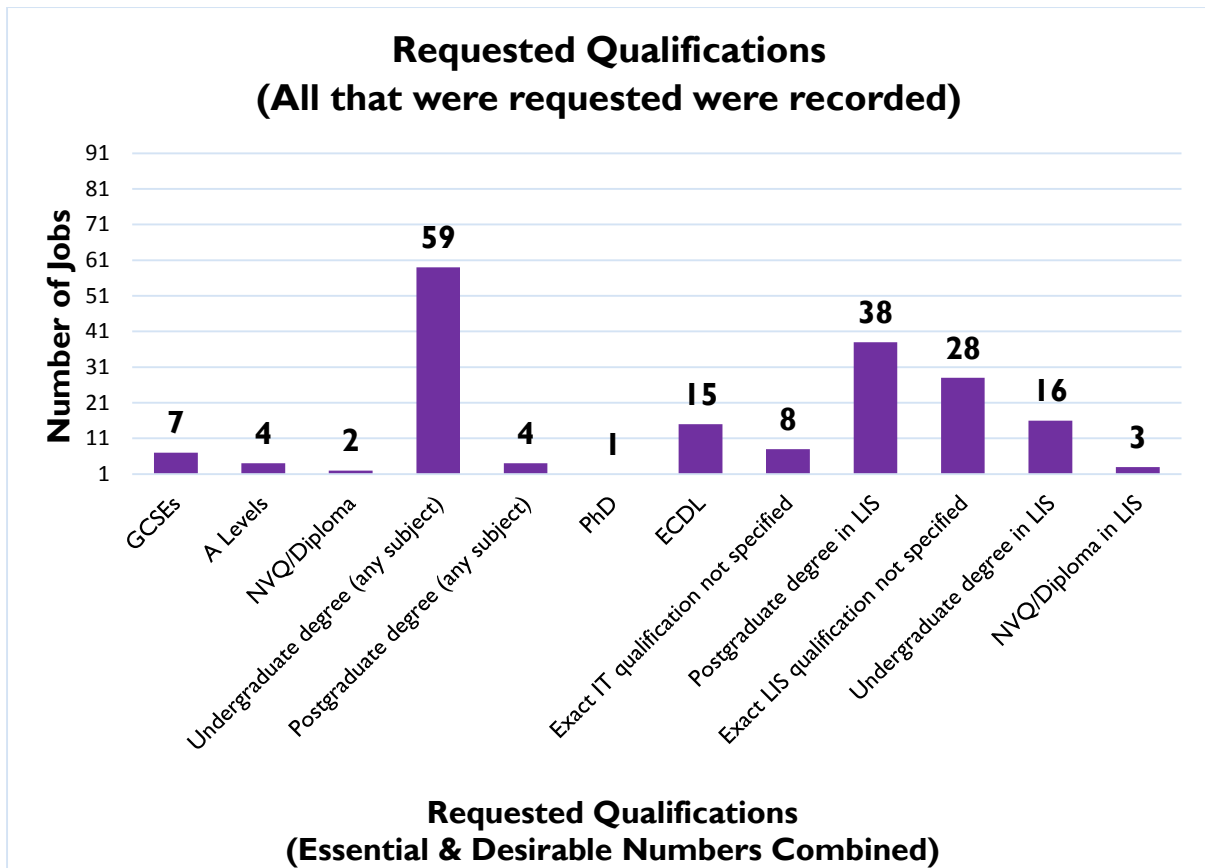
Figure 7: Graph to show requested qualifications

4.3.3   Is professional membership of relevant teaching and learning organisations necessary and/or advisable for LIS professionals?

The results of whether LIS professionals should hold professional memberships of relevant organisations was low (see Table 17); 61 out of the 91 jobs were coded 'not required'; this is a figure of 67%. This reflects that it is a weaker area with regards to employer expectations. This lack of professional memberships perhaps explains why within the literature little was discussed about them (Bennett, 2011); if employers are not placing a strong emphasis on joining these organisations, then the importance of them are diminished.

Professional Membership (All that were requested/listed were recorded)				
Professional body	Essential	Essential as %	Desirable	Desirable as %
Chartered member of CILIP	6	7	19	21
Membership of an appropriate professional body (not specified exactly)	0	0	4	4
HEA	0	0	1	1
IfL	0	0	0	0
ALT	0	0	0	0
CIPD	0	0	0	0
Not required	61 (67%)			

Table 17: Professional memberships

Specific organisations were infrequently mentioned. Despite Allan's (2002, p. 252) claims that LIS professionals were joining groups such as the IfL, the CIPD and the ALT, employers are not asking for membership of these specifically, although 4 jobs (4%) said it was desirable that candidates had membership of an appropriate professional body, but did not specify any by name. Within the literature, membership of the HEA was discussed (Feetham, 2006, p. 12; Shephard, 2006, p. 54; Shephard and Matthews, 2006, p. 9; Webb, 2010, slide 11), however only one job listed it, stating membership was desirable. This is surprising, given that the HEA recognises learning resource/library staff as typical individuals for AFHEA membership (UKPSF, 2011, p.4). A reason for employers not specifying the HEA is perhaps so as not to deter prospective employees.

Chartered membership of CILIP was low; 7% of jobs said it was essential, while 21% said it was desirable. Again, a reason for the lack of asking potential employees to be chartered is perhaps to not limit the number of people applying for these roles. Professional engagement within the LIS profession however was encouraged within the literature (Webb and Powis, 2004a, p. 186; Webb, 2010, slide 11) and it may be that many do belong to organisations such as CILIP, but this cannot be analysed from these results.

4.3.4   Overall ranking of skills, experience & knowledge: essential versus desirable

The results for all the skills, experience and knowledge (39 categories in total), and the ranking of these with regards to essential/desirable, are in Appendix 8. This was created to advise LIS professionals who work/would like to work in IL roles to focus on the top essential and desirable areas to maximise their careers. The top essential category is previous work experience in an information related role (82%). The least essential criteria includes specific teaching qualifications and membership of professional bodies. The top desirable category is being a Chartered member of CILIP. These rankings are unsurprising given the individual analysis and discussion contained in the above sections.

4.3.5   Does Library School prepare its graduates for IL roles?

The results of LIS course contents are unbalanced representations as to the topics and subjects included. This was discovered by Payne (2009, p. 67) in her study. The reason was due to the levels of detail regarding course and module content, and the level of the response rate when institutions were contacted; again this was encountered by Payne (2009, p. 67). However, the results can still be analysed.

The literature review identified many definitions of IL (Big Blue, 2002, p. 6; Walsh, 2011, pp. 3-4), and the debate regarding what constitutes a teaching role (Budd, 1982; Lupton, 2002; Walsh, 2011, pp. 7-8). In view of this, the concepts that IL includes were not broken down and analysed specifically, but the category of 'IL & supporting users' was created to combine the different topics that IL contains. The results highlighted how within the UK, there is no specific IL programme/course. Out of the 17 courses included within the study, 12 of them (71%) had no IL-specific module, as opposed to five courses (29%) which had an IL-specific module at either core or option level (Figure 8). Two courses at the University of Sheffield had both a core module in IL, and an option module regarding IL, suggesting that the Information School at the university places a greater emphasis on it.

Those containing a specific module in IL cover similar areas, for example, at the University of Sheffield the 'Information Resources and Information Literacy' module aims:

'To enable students to understand the concepts of information literacy and information behaviour from both theoretical and practical perspectives. Students will develop their own information literacy and understanding of its application to their future lives.' (University of Sheffield, 2014a).

Elements, such as IL concepts and reference to future/lifelong learning, can also be found in the module titled 'Information Literacy' run at Robert Gordon University:

'The module introduces current information literacy concepts, models and processes; includes the changing characteristics and nature of information; introduces the concepts of information seeking behaviour, identifying information needs, finding and evaluating information using a range of sources; organising, using and communicating information to achieve personal, social, occupational and educational goals; supporting others to become information literate; information literacy as a core prerequisite of the information society and as a key component of lifelong learning.' (Robert Gordon University, 2014c).

The module also titled 'Information Literacy', run at Aberystwyth University, contains the following aims:

'To enable students to becoming critical thinkers, intellectually curious observers, creators and users of information. That is, to become information literate and capable of sustaining and developing and teaching to others, that literacy skill throughout the changes of technology and information sources that will become available in coming years.' (Aberystwyth University, 2013c)

Here again, similar themes are covered; these module descriptions provide evidence of standardisation.
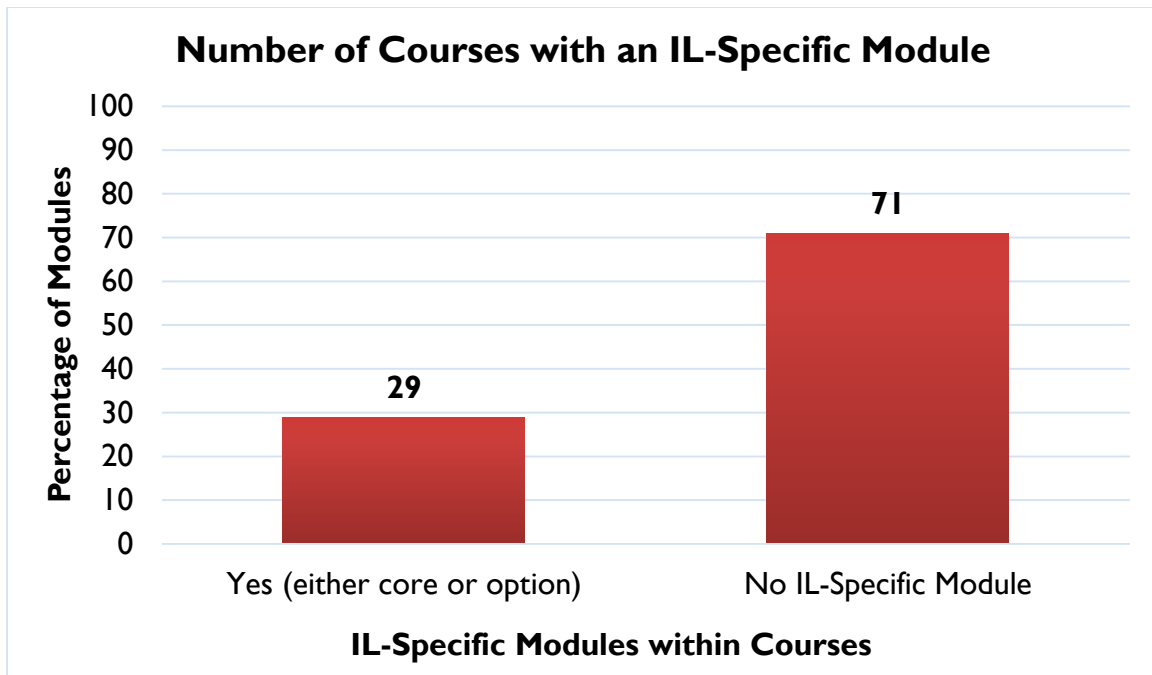
Figure 8: Graph to show the number of courses with an IL-specific module

Two out of the 17 courses did not contain IL in either a specific module or within other modules; 88% therefore did contain some form of IL, 12% did not contain any IL at all (Figure 9). There is no clear reasoning why two courses did not contain any elements of IL, only that summary data was available for these courses, therefore there is a potential that they could have contained IL topics.
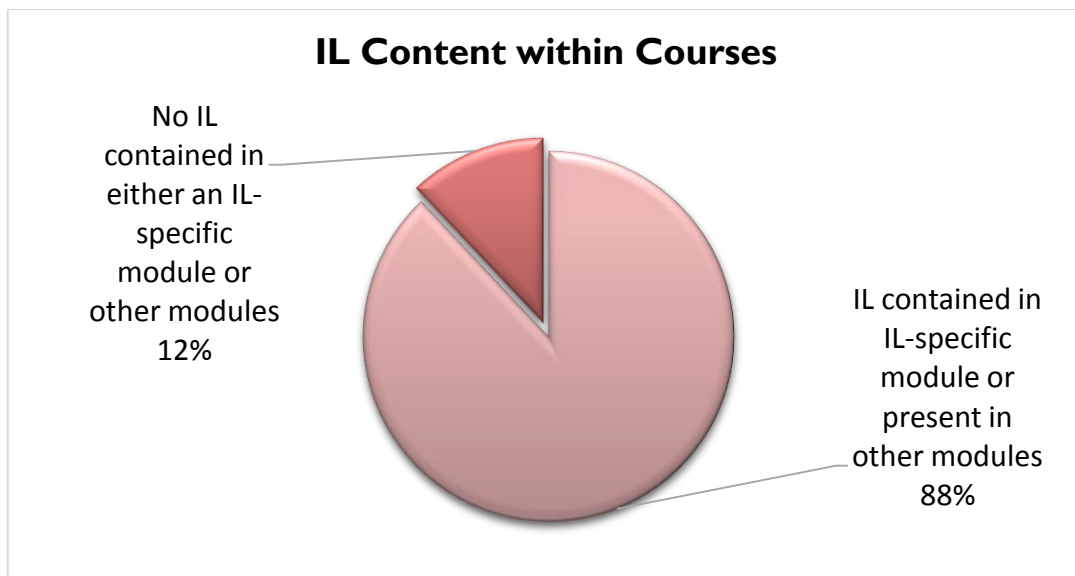
Figure 9: Graph to show the IL content within courses

The overall coverage of the categories coded within LIS courses, and their ranking, is shown in Table 18. Both digital literacy and IL and supporting users are ranked top, demonstrating that these areas are covered comprehensively within courses. Teaching and training skills is ranked at sixth, placing it in the middle. The literature suggests librarians supported the inclusion of teacher education into the LIS curriculum (Meulemans and Brown, 2001, p. 256; Bewick and Corrall, 2010, p. 100) and this shows that teaching skills feature in some courses, but not prominently.

Topics & Subjects	% (*N*=17)	Rank
Digital Literacy	88	1
IL & supporting users (IL specific modules & non-IL specific modules combined)	88	2
Professional development	77	3
Promotion/Marketing	59	4
Virtual Learning Environments (VLEs)	59	5
Teaching and training skills	29	6
Academic library environments	18	7
Library services for young people	18	8
Frameworks and curricula for education and training	6	9
Production of appropriate learning materials	6	10
Delivering induction sessions	0	11

Table 18: The percentage of courses covering identified category, and the ranking of that category

When further details of the IL and teaching and training skills content of LIS courses were requested, the reply received from the University of the West of England (UWE) was as follows:

> *'We have a 15 credit module in Information Literacy that includes aspects of teaching. The module content is only available to students at this moment.' (Reply 1).*

This highlights the difficulty of obtaining the exact content of LIS courses, and why the coding may not have produced an accurate portrayal of course content.

Another reply, received from Robert Gordon University, was more comprehensive:

> *'In both the MSc in Information and Library Studies and the MSc in Information Management we teach a module (Information Studies) which covers the basic principles of information literacy…The assignment for this module is a practical one and it involves addressing the real information needs of an enquirer (e.g. a member of staff working at the university or even an external client) by conducting a reference interview and subsequently searching for information on behalf of them using a range of different information sources. Then the students go on to write a literature review which synthesises key publications on that topic. The previous version of this assignment included the preparation of an information skills guide which aimed to educate a specific group of users on how to search across different sources using advanced search techniques and it involved an element of user instruction and training. So it did have an element of teaching information literacy in the form of preparing instructional IL materials.' (Reply 2).*

This highlights practical elements, and as the assignment focuses on teaching and training skills it is adequately preparing students for IL job roles. However, modules of this nature appear to be rare.

4.3.6   Comparisons of data

Those categories that could be mapped directly with the skills, experience and knowledge, and the duties of post, were compared from the same categories within the LIS course coding (Figure 10). The literature highlighted how IL teaching is present within LIS job roles in academic environments (Crawford, 2012, p. 2). This was reflected in the job descriptions discussed previously, and with regards to IL, library schools are preparing graduates with IL knowledge as 88% of courses contained some IL content. This conflicts with those who suggested that LIS courses do not contain IL concepts (Alcock, 2010, para. 7). With regards to teaching and training skills, and delivering induction sessions, LIS courses are not preparing graduates. The literature highlighted several previous studies which showed there was a lack of teaching skills within LIS courses (Patterson and Howell, 1990: Shronrock and Mulder, 1993; Kilcullen, 1998; Peacock, 2000a; Meulemans and Brown, 2001; Partello, 2005; Kemp, 2006; Albrecht and Baron, 2008; Hinchliffe, 2008; Whyte et al, 2008); this study therefore confirms these findings in the literature. The low percentage (29%) of LIS courses that contained teaching and training skills is a concern, as all but one included in the study were accredited by CILIP. Teaching and training skills feature within the PKSB and it was expected a higher percentage of courses would cover this in their modules. This confirms the

conclusion gained from the literature review that greater prominence needs to be given to teaching and training skills within LIS courses, and how departments and professional bodies need to work together more closely (Biddiscombe, 2002, p. 235).

Direct Comparisons
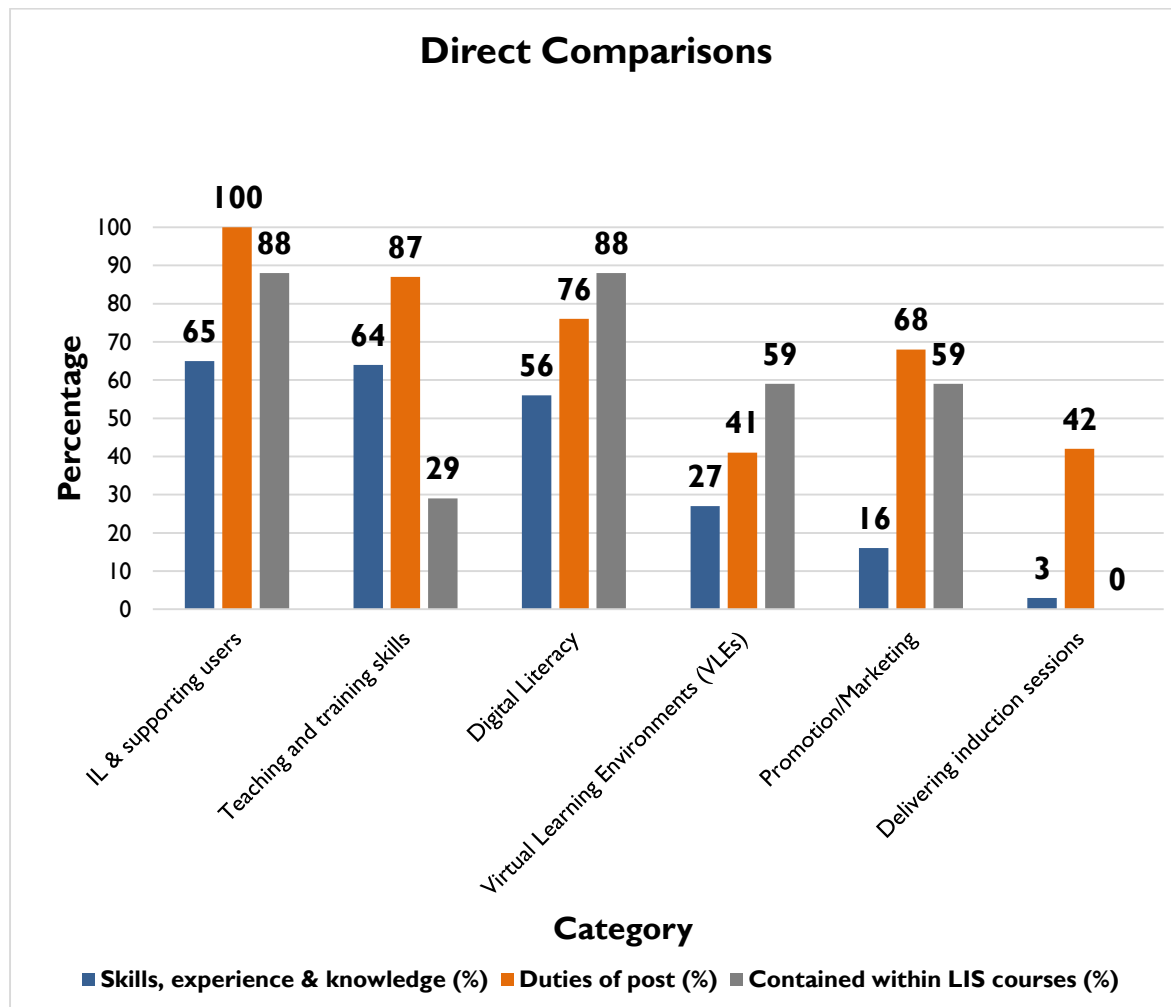
Figure 10: Direct comparisons of the skills, experience & knowledge, duties of post, and LIS course content categories

In terms of digital literacy (88%) and VLEs (59%), these areas were covered well. The percentages for these topics were higher than the percentage coverage within both the skills, experience and knowledge, and the duties of post areas. However, the percentage for VLEs would have been expected to be 100%, as all universities are now expected to have these; the low percentage is due to the fact that only available information was coded. Finally, concerning digital literacy, one module at the University of Sheffield titled 'Researching Social Media' stood out as this appeared to be unique:

'This module aims to gives students a theoretical as well as methodological grounding in the study of social media, whilst simultaneously adopting a hands-on approach. Students are actively encouraged to use different social media as part of this module, assessing them critically. The module addressed the study of (social media as) institutions, ethics, how to analyse users, #(hash)tags, networks, links, images, comments and sentiment.' (University of Sheffield, 2014b).

This illustrates how courses are reacting to prominent developments. Despite this, the specific category of keeping abreast of new developments was not included in the course coding, as it was felt that as courses are regularly reviewed their contents should contain the most up-to-date developments.

Both IL and supporting users (88%), and promotion/marketing (59%), were covered well by the courses, although the percentages for these were slightly lower than those for the number of jobs that contained these subjects as part of their duties. However, in terms of skills, experience and knowledge, the percentages of these contained within LIS courses were higher, therefore highlighting how LIS courses are preparing students for these roles by giving them knowledge of these areas.

In terms of professional development, this category was coded within the duties of posts and the LIS course contents. As shown in Figure 11, the figures for these were close; 74% of job descriptions listed this as a duty, and 77% of the courses contained some form of professional development content. Where the production of appropriate learning materials are concerned, only 6% of LIS courses contained this, as opposed to 43% of jobs that expected LIS professionals to produce these, therefore LIS courses need to include this more often.
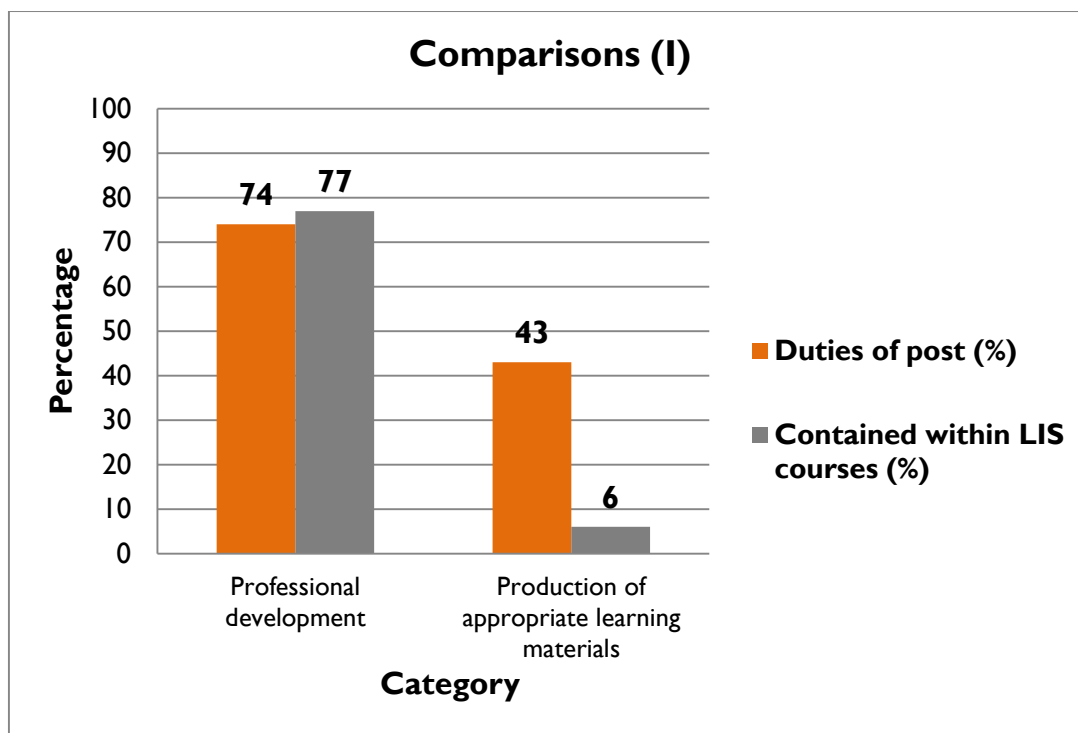
Figure 11: Comparisons of categories contained within the duties of post and LIS course content categories

Comparing the educational sector experience that was requested (Figure 12), 77% of jobs asked for this, compared to just 18% of courses that offered module content on academic libraries. It would be advisable to those who wish to work within FE/HE libraries that even if they do not have the opportunity to specifically study academic libraries as part of a course, they should gain work experience. Experience of working with young people only featured in 15% of courses, although 18% of courses had a module on library services for young people. The following description is taken from the 'Libraries, Information and Society II: Library Services for Children and Young People' module run at the University of Sheffield:

> *'This module will enable students to understand and critically evaluate key elements of the principles, functions, practice, value and impact of library services for children and young people (0-18 years). Via a series of lectures, seminars and site visits, the course will present the roles of these services, and the extent to which they work independently and together to support the educational, recreational and social needs of the users.' (University of Sheffield, 2014c).*

This allows students to specialise in this area if they so wish, although as the percentage for the experience of working with young people was so low, students may be advised to concentrate on other skills, experience and knowledge that feature more prominently.
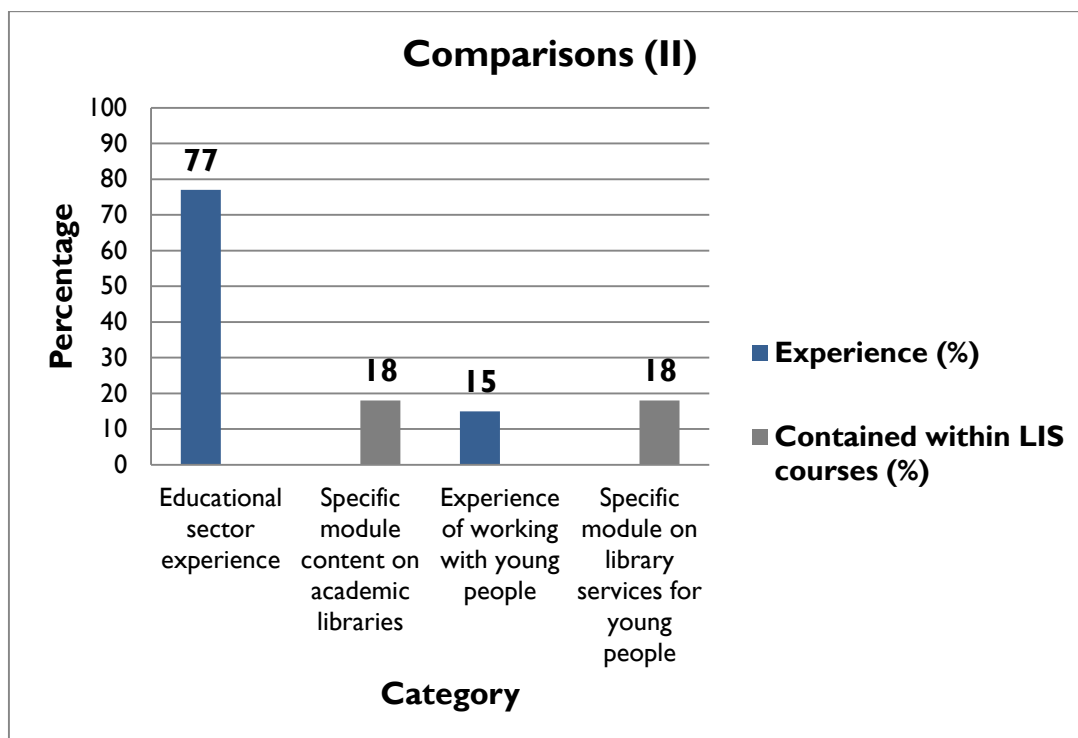
Figure 12: Comparisons of education sector experience requested in person specifications, and the corresponding specific modules within LIS courses

4.4   Summary

Advice for the LIS professional wishing to work within IL roles in FE/HE environments is to focus on gaining experience within an LIS environment. The minimum level of qualification required appears to be an undergraduate degree in any subject. Teaching qualifications were not highly asked for, and therefore, as the literature suggested that there were other ways to develop teaching and training skills, LIS professionals without teaching qualifications should not be disadvantaged within the job market. Skills, experience and knowledge of teaching and training were specified highly within jobs, and therefore LIS education needs to ensure that these skills are covered within courses. Regarding IL, courses are covering this well and this was a surprise; based on aspects of the literature it was thought that few courses would contain IL concepts, but the reality is the opposite. Professional memberships, although encouraged within the literature, are not highly sought after by employers. However, being

a Chartered member of CILIP was the top desirable category requested, and the advice to LIS professionals is to aim to become Chartered.

Chapter 5: Conclusion

5.1   Introduction

This chapter examines how the aims and objectives outlined in Chapter 1 were met. Limitations, and recommendations for further study, are provided.

5.2   Aims and Objectives

The aim of this research was to discover what skills and qualifications are required for LIS professionals within IL job roles, in FE/HE contexts in the UK, and if LIS professionals should hold formal teaching qualifications. It aimed to examine current job roles that included an element of IL teaching, along with the content of current LIS courses, in order to evaluate whether library schools are preparing graduates for these roles.

To achieve these aims the following objectives were identified:

- To determine whether LIS professionals should complete formal teaching qualifications.

- To identify whether UK Library School curricula contains IL content and teaching skills.

- To establish whether the skills taught on LIS programmes match the expectations of employers for those job roles which require an element of IL teaching and user education.

5.3   Main themes of the Literature Review

The literature review explored the arguments surrounding professional identity and the categorisation of LIS professionals. This was further determined through the arguments of whether librarians are teachers or trainers, concluding with the view that LIS professionals in FE/HE are both. The emergence of the Blended Librarian also suggested the integration of

the library into the teaching process. The varying definitions of IL were explored, and some literature argued that in IL roles, librarians were actually marketing. LIS professionals were strongly recommended to obtain formal teaching qualifications, however numerous other ways were given that teaching knowledge could be developed. There was a lack of literature about whether LIS professionals should join professional organisations, but the small amount published did encourage memberships of these. The literature suggested that library schools did not prepare their graduates for teaching roles, as teaching and training skills were absent in LIS curricula.

5.4   Methods used

This research used content analysis, using non-probability convenience samples. Two coding manuals were created, one for job descriptions and person specifications, the other for LIS course contents. In total, 91 job descriptions and person specifications from FE/HE contexts, which met the specified criteria of having IL and user education duties within them, were analysed. LIS courses (17 in total) were analysed to determine whether LIS course curricula matched the skills, knowledge, experience and duties that these IL job roles contained. Univariate and bivariate analysis was then completed.

5.5   Findings

The first objective of whether LIS professionals should complete formal teaching qualifications was analysed by ascertaining what teaching qualifications were specified in person specifications. The results showed that within FE/HE Colleges, LIS professionals would be advised to obtain these, although the small sample size did not provide a definitive conclusion. Within the HE (University) sector, there was not a strong emphasis on these qualifications. Taken overall, the second most desirable category was having a teaching qualification, the type of which was not specified. However, other qualifications were analysed, and the results showed that an undergraduate degree (subject not specified) was the second most essential category overall, placing this above teaching qualifications. To identify whether UK Library School curricula contains IL content and teaching skills, the contents of LIS courses were

analysed. The results showed that while IL is covered well, (even if this is within non IL-specific modules) teaching and training skills were not compared to the percentage of IL roles that required these skills, indicating that students may be ill-prepared for teaching duties. The research question of whether there is a distinction between training and teaching when working in the LIS profession was discussed within the literature, however the data collected was not sufficient to answer this. Where professional memberships of teaching and learning organisations are concerned, the data showed that employers are not emphasising these, although the top desirable category was to be a Chartered member of CILIP.

5.6   Limitations

The study was limited by time constraints, as only nine months (April-December 2013) of advertised job descriptions and person specifications were collected. Two recruitment sites were used to identify relevant jobs, therefore jobs advertised in other recruitment sources that may have been relevant, were not included. The sampling methods and the small number of job descriptions and person specifications prevent definitive generalisations from being made, as it was difficult to determine if the sample obtained was representative of the population. A major obstacle was the level of available detail regarding LIS course contents (either summary or detail level). When requests were made to obtain further information, the response rate was poor. This may have caused an unbalanced representation with regards to the content of LIS courses (Payne, 2009, p. 67). The use of content analysis was deemed appropriate due to the time constraints, however it was not possible to completely remove the coder's interpretation.

5.7   Recommendations for further study

- If this research was to be replicated, the sample size of job descriptions and person specifications should be increased.
- Only jobs that listed IL duties were included, therefore jobs where IL was not present were omitted. A comparison could be completed to discover the proportion of roles

that contain IL, versus those that do not, as it may be that other LIS jobs require teaching skills/knowledge.

- The coding manuals that were created did not focus on generic skills. Generic skills such as communication and team working may be found to be more important than specific ones such as IL and supporting users, or teaching and training skills. Generic skills could be coded and analysed, and the results compared.

- Qualitative methods, such as surveys and interviews among librarians in IL roles, could be carried out to determine whether LIS professionals are teachers or trainers.

- A mixed methods approach could also be adopted where interviews, questionnaires or focus groups are utilised to interview LIS course tutors and students, to ascertain the exact content of LIS courses.

5.8   Summary

This research achieves the objectives set out. With regards to whether LIS professionals should complete formal teaching qualifications, the research shows that this is desirable, rather than essential. In a competitive job market, holding teaching qualifications, along with professional memberships, would be an advantage for LIS professionals to obtain. The advice based on these results would be for LIS professionals to ultimately aim to complete these. The research shows that UK Library School curricula contains IL content, but is lacking in teaching skills content. Overall, LIS programmes match the expectations of employers for job roles requiring an element of IL knowledge and user education, but there is a discrepancy regarding teaching and training skills, highlighting a disservice to graduates. However, the sample size of the job descriptions and person specifications, and the level of detail accessible regarding LIS course content, limit the value and trustworthiness of the findings. Nevertheless, the research highlights how LIS professionals are both librarians and teachers, and the literature suggests that many eventually complete teaching qualifications. In conclusion, LIS professionals therefore have hybrid roles, due to the skills, experience, and knowledge they are expected to have, and the duties they perform, in IL roles.

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Appendices

Appendix 1: UKPSF for teaching and supporting learning in HE: Descriptor 1 – Associate Fellow

Descriptor 1	Typical individual role/career stage	Related HEA recognition
Demonstrates an understanding of specific aspects of effective teaching, learning support methods and student learning. Individuals should be able to provide evidence of: I. Successful engagement with at least two of the five Areas of Activity II. Successful engagement in appropriate teaching and practices related to these Areas of Activity III. Appropriate Core Knowledge and understanding of at least K1 and K2 IV. A commitment to appropriate Professional Values in facilitating others' learning V. Relevant professional practices, subject and pedagogic research and/or scholarship within the above activities VI. Successful engagement, where appropriate, in professional development activity related to teaching, learning and assessment responsibilities	Individuals able to provide evidence of effectiveness in relation to their professional role(s), which, typically, will include at least some teaching and/or learning support responsibilities. This teaching and learning role may sometimes be undertaken with the assistance of more experienced teachers or mentors. Typically, those likely to be at Descriptor 1 (D1) include: a. Early career researchers with some teaching responsibilities (e.g. PhD students, GTAs, contract researchers/post doctoral students etc.) b. Staff new to teaching (including those with part-time academic responsibilities) c. Staff who support academic provision (e.g. learning technologists, learning developers and learning resource/library staff) d. Staff who undertake demonstrator/ technician roles that incorporate some teaching-related responsibilities e. Experienced staff in relevant professional areas who may be new to teaching and/or supporting learning, or who have a limited teaching portfolio	Associate Fellow

Taken from: UKPSF. (2011). *The UK Professional Standards Framework for teaching and supporting learning in higher education*. Retrieved from http://www.heacademy.ac.uk/assets/documents/ukpsf/UKPSF_2012_v2_050912_1044.pdf, p. 4.

Appendix 2: Table of courses considered within this study

The following courses are all analysed within this study and are running for the academic year 2014-15. They are all based at UK HE institutions.

Undergraduate Course						
Institution	**Department/School**	**Course Title**	**Course Qualification**	**Study Options**	**Course Length**	**Accredited by CILIP**
Aberystwyth University	Department of Information Studies	Information and Library Studies (Single Honours)	BSc Econ	Distance Learning	5 years	✓

The courses running at Glyndwr University were not included, as the BSc (Hons) Library and Information Management is a one year top-up degree for the FdSc Library and Information Practice course.

Graduate Certificate Course						
Institution	**Department/School**	**Course Title**	**Course Qualification**	**Study Options**	**Course Length**	**Accredited by CILIP**
Robert Gordon University	Department of Information Management	Information Studies	Graduate Certificate	Online Learning	9 months	✘

Postgraduate Courses						
Institution	Department/School	Course Title	Course Qualification	Study Options	Course Length	Accredited by CILIP
Aberystwyth University	Department of Information Studies	Information and Library Studies	MA Econ / Diploma	Full Time / Distance Learning	1 year / 5 years	✓
City University London	School of Informatics	Information Science	MSc	Full Time / Part Time	1 year / 24-28 months	✓
City University London	School of Informatics	Library Science	MSc / MA	Full Time / Part Time	1 year / 24-28 months	✓
Manchester Metropolitan University	Department of Information and Communications	Library and Information Management	MA	Full Time / Part Time	1 year / 3 years	✓
Manchester Metropolitan University	Department of Information and Communications	Information Management	MSc	Full Time / Part Time	1 year / 3 years	✓
Northumbria University	Mathematics and Information Sciences	Information and Library Management	MA / MSc	Distance Learning	2 years	✓
Robert Gordon University	Department of Information Management	Information and Library Studies	MSc	Full Time / Online Learning	45 weeks / 3 years	✓
Robert Gordon University	Department of Information Management	Information Management	MSc	Online Learning	3 years	✓
University College London	Department of Information Studies	Library and Information Studies	MA	Full Time / Part Time / Modular	1 year / 2 years / 5 years	✓
University College London	Department of Information Studies	Information Science	MSc	Full Time / Modular	1 year / 2-5 years	✓

University of Sheffield	Information School	Information Management	MSc	Full Time / Part Time	I year / 2-3 years	✓
University of Sheffield	Information School	Librarianship	MA	Full Time / Part Time	I year / 2 years	✓
University of Strathclyde	Computer and Information Sciences	Information and Library Studies	MSc	Full Time	I year	✓
University of Strathclyde	Computer and Information Sciences	Information Management	MSc	Full Time	I year	✓
University of the West of England	Computer Science and Creative Technologies	Information Management	MSc	Full Time / Part Time	I year / 2-3 years	Pending

The MSc Library and Information Management course at the University of Ulster was not included in the study, as only module titles, and no module details, were obtainable. The Information Management courses at Loughborough University, and at the University of Glasgow, were not included, as they were all joint honours courses.

The MA Information Studies course at the University of Brighton was not recruiting new students in 2014-15, as a review of all the postgraduate courses in computing was being conducted, and therefore this course was also not included in the study (CILIP, 2013e).

Appendix 3: Letter to Library Schools/Admissions Tutors

Dear [insert name]

My name is Heather Langstaff and I am a Master's student at Aberystwyth University, studying an MSc Econ in Information and Library Studies by distance learning. As part of my course, I am undertaking a research project under the supervision of Juanita Foster-Jones. This project is investigating the concept of 'The Teaching Librarian' and I am analysing what qualifications and skills are required for those jobs that have an information literacy/user education role within academic library contexts. I am therefore interested in researching whether library school is preparing graduates for these roles; I am aiming to discover whether courses contain any reference with regards to information literacy, and specifically, teaching skills. I would therefore be very grateful if you could send me details regarding the content of the following courses, especially with regards to the details of any option modules available and their credit rating:

[insert course title/s & level/s here]

Equally, I would be very interested to hear from you if your courses do not contain any elements of teaching skills or information literacy.

Please understand that your participation in this study is entirely voluntary. By supplying this information, you are giving your consent for the data that you have provided to be used for the purpose of research, the details of which will be used only to assist in data analysis. Your individual name will not be used in any way and will remain confidential, although the name of the institution and the course details will be contained within the study.

If you require any further information, please contact me at ██████████ with any questions.

Thank you in advance for your help.

Kind regards,

Heather Langstaff
MSc Econ Information and Library Studies Student, Aberystwyth University

Appendix 4: Job Description and Person Specification Coding Manual

PRELIMINARIES	
Source of job advert	1. www.lisjobnet.com 2. www.fejobs.com
JOB TITLE & SECTOR	
Job title	1. Academic Liaison Librarian 2. Academic Librarian 3. Academic Skills Tutor Librarian 4. Academic Support Librarian 5. Assistant Librarian 6. Collections Support Librarian 7. Deputy Librarian 8. E-Learning Facilitator 9. E-Resources Librarian 10. Faculty Liaison Librarian 11. Head of Academic Development and Delivery 12. Head of Library Academic Liaison 13. Information and Learning Resources Manager 14. Information Assistant 15. Information Consultant 16. Information Librarian 17. Information Manager 18. Information Skills Librarian 19. Learning and Research Services Manager 20. Learning and Teaching Support Librarian 21. Learning Centre Advisor 22. Learning Centre Assistant 23. Learning Centre Manager 24. Learning Centre Team Leader 25. Learning Centre Tutor 26. Learning Resource Assistant 27. Learning Resource Centre Co-ordinator 28. Learning Resource Centre Support Tutor 29. Learning Resource Facilitator 30. Learning Resource Specialist 31. Learning Resources Advisor 32. Learning Resources Team Leader 33. Librarian

	34. Library Academic Services Manager 35. Library and Learning Support Manager 36. Library Assistant 37. Library Facilitator 38. Library Manager 39. Other 40. Reader Services Librarian 41. Research Support Librarian 42. Resources Librarian 43. Senior Librarian Subject and Research Support 44. Senior Library Assistant 45. Student Support Librarian 46. Subject Librarian 47. Team Leader: Library Academic Services 48. Tutor Librarian 49. User Experience Librarian
Employment sector	1. FE/HE College 2. HE (University)
SKILLS, EXPERIENCE & KNOWLEDGE	Include essential as well as desirable points and note accordingly. Record all that apply/will be accepted where appropriate. If appropriate, record if categories are not required.
General education level *(Record all that apply/will be accepted)*	1. GCSEs a. Essential 2. A Levels b. Desirable 3. NVQ/Diploma (subject not specified) 4. Undergraduate degree (subject not specified) 5. Postgraduate degree (subject not specified) 6. PhD (subject not specified) (Record -1 if not required)
Teaching qualifications *(Record all that apply/will be accepted)*	1. PTLLS a. Essential 2. Certificate in Delivering Learning b. Desirable

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	3. Cert Ed 4. PGCert in Teaching and Learning 5. PGCE 6. PGCHE 7. Exact Teaching qualification not specified (Record -1 if not required)	
IT qualifications *(Record all that apply/will be accepted)*	1. ECDL 2. Exact IT qualification not specified (Record -1 if not required)	a. Essential b. Desirable
Professional qualification in LIS work *(Record all that apply/will be accepted)*	1. NVQ/Diploma in LIS 2. Undergraduate degree in LIS 3. Postgraduate degree in LIS 4. Exact LIS qualification not specified (Record -1 if not required)	a. Essential b. Desirable
Previous work experience within an information related role	1. Yes (Record -1 if not required)	a. Essential b. Desirable
Specific educational sector experience	1. FE/HE College 2. HE (University) 3. Exact educational environment/setting not specified (Record -1 if not required)	a. Essential b. Desirable
Experience of working with young people	1. Yes	a. Essential b. Desirable

	(Record -1 if not required)
Professional status *(Note any requested affiliation to a professional body and record all that apply)*	1. Chartered member of CILIP a. Essential b. Desirable 2. IfL 3. HEA 4. ALT 5. CIPD 6. Membership of an appropriate professional body (Record -1 if not required)
	For the following, if yes, note whether essential or desirable. Only include if stated – do not infer.
Information Literacy (IL) & supporting users *Knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner. Having experience and skills in helping users to find the information they need; helping them to appraise, understand and evaluate information/resources and enabling them to help themselves in future.*	1. Yes a. Essential b. Desirable 2. No
Digital Literacy *Experience of using digital technology tools and information and learning technologies (ILT); blended librarianship; electronic libraries; social media.*	1. Yes a. Essential b. Desirable 2. No
Frameworks and curricula for education and training *An understanding of these aspects relevant for any particular environment or user group.*	1. Yes a. Essential b. Desirable 2. No

Delivering induction sessions *Skills, knowledge and experience of designing, implementing and delivering user induction sessions.*	1. Yes 2. No	a. Essential b. Desirable
Teaching and training skills *Understand and apply skills for effective teaching and training; awareness of how people learn and understanding of the learning experience. Includes having a knowledge of pedagogical theories. Include the experience of delivering workshops and one-to-one user support in information and research skills.*	1. Yes 2. No	a. Essential b. Desirable
Virtual Learning Environments (VLEs) *Understand the use of VLEs and appreciate how they can be used for information literacy instruction and providing library/information services.*	1. Yes 2. No	a. Essential b. Desirable
Promotion/Marketing *Of sources/services provided by those in a teaching librarian role.*	1. Yes 2. No	a. Essential b. Desirable
Specialist subject knowledge *Either academic or vocational.*	1. Yes 2. No	a. Essential b. Desirable
Specific software knowledge *Any specifically named software or software type relevant to the post. This also includes experience of educational software.*	1. Yes 2. No	a. Essential b. Desirable

DUTIES OF POST	Only include if stated - do not infer. (Note frequency of request within the Coding Schedule).
Information Literacy (IL) & supporting users *Knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner. Theory & research into IL. Having experience and skills in helping users to find the information they need; helping them to appraise, understand and evaluate information/resources and enabling them to help themselves in future.*	1. Yes 2. No
Digital Literacy *Using digital technology tools and information and learning technologies (ILT); blended librarianship; electronic libraries; social media.*	1. Yes 2. No
Delivering Induction Sessions *To design, implement and deliver user induction sessions.*	1. Yes 2. No
Teaching and training skills *Design and deliver a range of learning activities for specific audiences/users; undertake assessment and give feedback; evaluate experiences. Include the provision of workshops and one-to-one user support in information and research skills (this also includes producing schemes of work, lesson plans etc.).*	1. Yes 2. No
Production of appropriate learning materials *Production of user guides, information booklets etc.*	1. Yes 2. No

Virtual Learning Environments (VLEs) *Provide support in using VLEs to those within the organisation (either staff or students).*	1. Yes 2. No
Internal liaison with teaching colleagues/faculties/departments *Within organisation. Also include regular attendance at course and termly review meetings.*	1. Yes 2. No
Promotion/Marketing *Of sources/services provided by those in a teaching librarian role.*	1. Yes 2. No
Keeping abreast of new developments *Within FE/HE, Developments within teaching, Resource-based learning, Information and Learning Technologies.*	1. Yes 2. No
Committed to continuing professional development *Include attendance at conferences, workshops etc.*	1. Yes 2. No

Adapted from Payne (2009). Categories also included from the full CILIP PKSB (CILIP, 2012a).

Appendix 5: Sample Job Description and Person Specification and the Coding Schedule for this particular case number

Case Number: 27

******** COLLEGE

Job Description

Post title:	Learning Centre Tutor
Department:	*****
Based at :	*****
Reports to:	Learning Centre Manager
Grade/salary scale:	*****

Generic role of post:

The College Learning Centres provide students and staff with resources in a variety of formats (ie books, eBooks, magazines, eJournals etc) and with services and facilities to support and develop their learning skills and to help them succeed. The acquisition, management and promotion of Learning Centre resources is key to the role of Learning Services and Learning Centre Tutors have delegated responsibility for this activity in specified curriculum areas.

Learning Centre Tutors deliver and support learning within the Learning Centre with particular emphasis on IT, study, information and research skills. Learning Centre Tutors are responsible for the delivery of scheduled support classes and for non-scheduled support and guidance to individual students and groups. Learning Centre Tutors are required to make extensive use of information and learning technology (ILT). Effective liaison with teaching teams and Learning Services colleagues is a key element of the job role, as is the development and promotion of resource-based learning and e-learning to include the initial support and continuing professional development of College staff in information literacy, IT and ILT.

Specific duties:

1. Provide a comprehensive information service using appropriate media/platforms and promote this to all potential users.

2. Develop the information literacy skills of the students and staff.

3. Select, develop and manage stock within the Learning Centre in collaboration with teaching and other Learning Services staff.

4. Participate in the cataloguing, classification and keywording of Learning Centre stock.

5. Responsible for the provision of 'drop-in' workshops and scheduled sessions in the Learning Centre for students and staff in IT, ILT, study, information and research skills using a facilitative/resource-based learning approach.

Learning Centre Tutor 2013   1   LCMs/April2013

6. Provide guidance and support in assignment and project work (including study, information and research skills), and in the effective use of appropriate IT applications, the Internet, the College Intranet and VLE and other eResources.

7. Produce appropriate learning materials to enable the provision of formal and informal delivery of IT, study, information and research skills.

8. Deliver appropriate staff development and training.

9. Develop and promote the use of ILT within the College and the Learning Centre.

10. Liaise closely with appropriate Course Managers and other teaching colleagues in specified departments, to include attendance at course and termly review meetings.

11. Work with all departments to ensure the Learning Centre effectively supports students' learning.

12. Carry out any administrative requirements associated with the Learning Centre.

13. Contribute to the maintenance of records to support management information requirements. To include the quantitative and qualitative evaluation of services, equipment and resources.

14. Keep abreast of new developments in learning and teaching and participate in relevant training.

15. Comply with the College and Learning Services Health and Safety policy.

16. Undertake other allocated duties in support of Learning Centre activity as required.

Person Specification:

Qualifications:

Essential:
At least two of the following however post holders may be required to complete further qualifications when in post.

- Degree
- A professional qualification or significant experience in library or information work
- Initial FE teaching qualification at Level 3 or above e.g. PTLLs, C&G 7302 Certificate in Delivering Learning, Cert Ed, PGCE
- A recognised IT qualification e.g. ECDL

Skills & Experience:

Essential:

Comment [HL13]: Teaching and training skills

Comment [HL14]: IL & supporting users

Comment [HL15]: VLEs

Comment [HL16]: Digital Literacy

Comment [HL17]: Production of appropriate learning materials

Comment [HL18]: IL & supporting users

Comment [HL19]: Teaching and training skills

Comment [HL20]: Promotion/ Marketing

Comment [HL21]: Digital Literacy

Comment [HL22]: Internal liaison with teaching colleagues/faculties/departments

Comment [HL23]: Internal liaison with teaching colleagues/faculties/departments

Comment [HL24]: Keeping abreast of new developments

Comment [HL25]: Committed to professional development

Comment [HL26]: The following points that are highlighted are also coded as Essential

Comment [HL27]: General Education Level – all that apply/will be accepted are coded

Comment [HL28]: Professional qualification in LIS work

Comment [HL29]: Previous work experience within an information related role

Comment [HL30]: These are coded under "Teaching qualifications"

Comment [HL31]: IT qualifications

Comment [HL32]: The following points that are highlighted are coded as Essential

- Relevant commercial/vocational experience e.g. education, library, office or customer service environment
- Ability to undertake accurate data input
- Good command of written English
- An understanding of and ability to deliver excellent customer service
- Ability to work as part of a team as well as on your own initiative
- Experience in working with young people in a supervisory capacity

Personal Attributes and Qualities

Essential:
- Ability to relate to and communicate effectively with people of all ages and abilities.
- A commitment to the promotion and development of ILT, resource-based and student-centred learning methods
- Organised and methodical
- Work accurately and systematically in a multi-tasking situation with frequent interruptions
- A positive and non-judgemental attitude
- Co-operative and flexible approach
- Excellent IT skills

Desirable:
- Knowledge of computer software and programmes generally in use in Libraries\Learning Centres
- Understanding of library operations

Comment [HL33]: Specific educational sector experience

Comment [HL34]: Previous work experience within an information related role

Comment [HL35]: Experience of working with young people

Comment [HL36]: The following points that are highlighted are coded as Essential

Comment [HL37]: Promotion/ Marketing

Comment [HL38]: Digital Literacy

Comment [HL39]: Teaching and training skills

Comment [HL40]: The following points that are highlighted are coded as Desirable

Comment [HL41]: Specific software knowledge

Any special conditions attaching to the post:

The postholder will be based at *****. The postholder will be expected to travel to other sites to attend training events and meetings and to cover for holidays and sickness. An allowance will be paid to cover the costs of travel to other sites. The postholder will be expected to work flexible hours to meet service demands, some evening and weekend work will be required.

Please note: All employees of ***** are required to undertake mandatory Safeguarding, health and safety, data protection and Equality & Diversity Training. All statutory checks governed by "every child matters" will need to be completed before commencing employment.

Please assume if you have not heard from us within 28 days of the closing date, that you have not been shortlisted for this position.

- **Coding Schedule for the previous sample Job Description and Person Specification**

Case Number	27
PRELIMINARIES	
Source of job advert	2
JOB TITLE & SECTOR	
Job title	25
Employment sector	1
SKILLS, EXPERIENCE & KNOWLEDGE	
General education level	4a
Teaching qualifications	1a, 2a, 3a, 5a
IT qualifications	1a
Professional qualification in LIS work	4a
Previous work experience within an information role	1a
Specific educational sector experience	3a
Experience of working with young people	1a
Professional status	2
IL & supporting users	2
Digital Literacy	1a
Frameworks and curricula for education and training	2
Delivering induction sessions	2
Teaching & training skills	1a
VLEs	2
Promotion / Marketing	1a
Specialist subject knowledge	2
Specific software knowledge	1b
DUTIES OF POST (Number in red denotes frequency of duty within job description, if appropriate)	
IL & supporting users	1, 4
Digital Literacy	1, 4
Delivering induction sessions	2
Teaching & training skills	1, 3

Production of appropriate learning materials	1, 1
VLEs	1, 1
Internal liaison with teaching colleagues/faculties/departments	1, 3
Promotion / Marketing	1, 2
Keeping abreast of new developments	1, 1
Committed to continuing professional development	1, 1

Appendix 6: Course Coding Manual

COURSE PRELIMINARIES	
University	Give name
Course Title	Give name
Is this specifically an IL programme/course?	1. Yes 2. No
Course Level	1. Undergraduate 2. Graduate Certificate 3. Postgraduate
Accredited by CILIP	1. Yes 2. No 3. Pending
Department	Give name
GENERAL COURSE DETAILS & STRUCTURE	
Total number of course credits	Give figure
Total number of core credits or modules	Give figure & specify whether number represents credits or modules; use -1 if no data available
Total number of core modules considered	Give figure
Total number of optional credits or modules	Give figure & specify whether number represents credits or modules; use -1 if no data available
Total number of option modules considered	Give figure, or use -1 if only module titles, and no details, are given

Specific module on Information Literacy (IL)	1. Yes
	   a. Option
	   b. Core
	
	2. No

Specific module content on academic library environments	1. Yes
	   a. Option
	   b. Core

	2. No

Specific module on library services for young people	1. Yes
	   a. Option
	   b. Core
	
	2. No

Virtual Learning Environments (VLEs)	1. Yes a. Used by students enrolled on the module for study purposes b. Students enrolled on the module learn about VLEs 2. No
TOPICS & SUBJECTS COVERED BY OTHER MODULES	If yes, also note number of modules which cover these topics and subjects within the Coding Schedule. Do not infer unless not doing so would mis-represent what is covered by the module.
IL & supporting users (within non-IL specific modules) *Definitions of IL; concepts, models & processes of information seeking behaviour; identifying information needs (provision, use and sharing of information); finding & evaluating information; coping with information overload; real practice of performing information literate information seeking (e.g. reference interviews); recognising the changing nature of information formats, access, use and dissemination.*	1. Yes 2. No
Digital Literacy *Concerned with the digital divide; ICT in information and library provision (specifically regarding instructional technology & learning technologies – blended*	1. Yes 2. No

librarianship); electronic libraries; Social media.	
Delivering induction sessions *Both practical and taught skills.*	1. Yes 2. No
Frameworks and curricula for education and training *An understanding of these aspects relevant for any particular environment or user group.*	1. Yes 2. No
Teaching and training skills *Understand and apply skills for effective teaching and training; facilitating user/learner skills development; awareness of how people learn; design and/or deliver a range of learning activities; understand and apply how to give learners assessments; understand and apply how to give learners feedback; evaluate experiences of teaching; examine and evaluate the range of methods for supporting others (helping to create the autonomous learner, lifelong learning).*	1. Yes 2. No
Production of appropriate learning materials *User guides; information booklets.*	1. Yes 2. No
Promotion/Marketing *Of sources/ services; impact towards achievement of organisational goals.*	1. Yes 2. No
Professional development *Study tours; placements; work-based development. (Do not include Dissertations).*	1. Yes 2. No

ADDITIONAL INFORMATION	
Information on website and/or in course literature (e.g. prospectus)	1. Detailed data 2. Summary data
Request for further details answered	1. Yes 2. No
Other comments	Give assessment details or other comments if relevant

Adapted from Payne (2009). Categories also included from the full CILIP PKSB (CILIP, 2012a).

- **An example of summary data available for coding:**

Home / What can I study? / Courses / Information Management

What can I study?

- Courses
  - January 2014 courses
  - Courses a-z
  - Courses by subject
  - Federation college courses
  - Undergraduate courses
  - Professional and short courses
  - Postgraduate courses
  - Part-time courses
- Undergraduate study guide
- Postgraduate study guide
- Professional and short courses
- Applying to UWE
- Study abroad
- Parents' guide
- Clearing

MSc
Information Management

About | Structure | Features | Careers | Fees | Entry

Structure

Content

The programme seeks to equip students with the knowledge, skills and attitudes necessary to undertake information work and to manage a library or information service effectively. To this end, the taught component is divided into:-

- **Information contexts :** A foundation in the range of library and information contexts in which people work today, together with a rounded view of the role of the information professional. Practice domains include academic and public libraries, government, legal and corporate information services and health libraries. Marketing, facilitation, communication and social media skills are amongst those covered along with essential information governance issues relating to legislation and security.
- **Information literacy:** The theory and practice behind understanding information needs and in helping service users to find, evaluate and interpret information. The emphasis is on developing the ability to provide hands-on training and guidance to learners.
- **Personal and organisational management:** Students will improve their ability to manage time and workplace projects and will gain insight into key areas in change and human resource management, planning and evaluation.
- **Knowledge organisation:** From traditional cataloguing and classification to the use of digital metadata and schemata to describe information resources. The component also covers information retrieval and practical approaches to building and maintaining digital collections.

An additional optional component** will consist of two options from:

- Information and Knowledge Management
- Information Architecture and Web Design
- Management of Database Systems
- Designing the User Experience
- Emerging Topics in Computing

**subject to availability

Following the taught component, students will be able to undertake either

a) A research dissertation in a relevant topic or

b) A work-based project that applies the theory and practice covered in the taught components to a real-world project.

Student's view

"The course has enabled me to gain professional employment as an Academic Liaison Librarian. My work is continually informed by the information and skills I acquired during my MSc" Carly

Next steps

- **Apply for this course**
- **Prospectus Request**
- **Register for an Open Day**
- **New course search**

You might also be interested in:

- Information Technology

Courses you have viewed:

- Information Management

Module description only a paragraph, and therefore this was the only information available for coding

No details are given for **Option Modules** – only module titles are given and therefore these option modules were not coded

Taken from: UWE. (2014). *MSc Information Management: Structure.* Retrieved from http://courses.uwe.ac.uk/P11012#coursecontent

- **An example of detailed data available for coding:**

RGU ABERDEEN

Module Credit rating

Reference	BSM050
SCQF Level	SCQF 11
SCQF Points	15
ECTS Points	7.5
Created	August 2002
Approved	May 2006
Amended	August 2013
Revision No.	4

Module Title
Information Studies

Keywords
Information searching, information sources, search language, information services, information literacy, users

Keywords given

Prerequisites for Module

None in addition to course entry requirements.

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To provide the student with the ability to evaluate the sources of information and the manner in which information may be mediated in response to the full range of information needs, both organisational and individual.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1. evaluate critically the major tools of bibliographic control of monographs, journal literature, online resources and other significant categories.
2. evaluate the execution and the results of specific searches for information.
3. appraise critically the role and value of information services in a variety of settings.
4. justify the use of the most appropriate sources of information in a range of different contexts.
5. analyse the needs of user communities in order to design and implement effective information provision.

Indicative Module Content

Bibliographic control of monographs, journal literature, grey literature, government publications, technical literature and digital materials. Quick reference sources of information; strengths and limitations of sources; variety of physical format. Digital sources of information. Sources of arts and humanities, scientific and social science information. Public affairs information, statistical information, health information, business and technical information. Search strategies, client communication, information literacy, user communities and needs; presentation of information.

Indicative Student Workload

Contact Hours	Full Time	Part Time	Distance Learning
Assessment	29	29	15
Lectures	12	12	0
Tutorials/Seminars/Online Discussion	24	24	11
Directed Study			
Directed Study	25	25	124
Private Study			
Private Study	60	60	0

Mode of Delivery

Lectures, practical exercises, groupwork and tutorials.

Aims of Module and **Learning Outcomes** are given and were used to aid coding

Assessment Plan

| | Learning Outcomes Assessed |
| Component 1 | 1,2,3,4,5 |

students will undertake an information enquiry for a real life client

Assessment details are given and were used to aid coding

Indicative Bibliography

1. ANDRETTA, S., 2005. *Information literacy: a practitioner's guide*. Oxford: Chandos
2. CASE, D.O., 2007. *Looking for information: a survey of research on information seeking, needs, and behavior*. 2nd ed. Amsterdam: Academic Press.
3. FISHER, K. E., ERDELEZ, S., and MCKECHNIE, E. F., 2005. eds. *Theories of information behavior*. Medford, NJ: Information Today.
4. KUHLTHAU, C.C., 2004. *Seeking meaning: a process approach to library and information services*. 2nd ed. London: Libraries Unlimited.
5. RUMSEY, S., 2008. *How to find information: a guide for researchers*. 2nd ed. Maidenhead: Open University Press.

Additional Notes

In addition to the above bibliography, students will be directed to monographs and journal articles relating to the specific aspects of the syllabus as the course progresses.

Indicative Module Content given and used to aid coding

Robert Gordon University, Garthdee House, Garthdee Road, Aberdeen, AB10 7QB, Scotland, UK: a Scottish charity, registration No. SC013781

Taken from: Robert Gordon University. (2014d). *Learning Robert Gordon University: Module Title Information Studies.* Retrieved from

http://www4.rgu.ac.uk/prospectus/modules/disp_moduleView.cfm?Descriptor=BSM050

Appendix 8: Ranking of Skills, Experience & Knowledge by Essential & Desirable Percentages (FE/HE College & HE (University) combined results)

Skills, Experience & Knowledge	Essential as % (N=91)	Rank	Skills, Experience & Knowledge	Desirable as % (N=91)	Rank
Previous work experience within an information related role	82	1	Chartered member of CILIP	21	1
Undergraduate degree (subject not specified)	64	2	Exact teaching qualification not specified	19	2
IL & supporting users	62	3	Specialist subject knowledge	16	3
Teaching and training skills	56	4	Virtual Learning Environments (VLEs)	16	4
Digital Literacy	41	5	Digital Literacy	15	5
Postgraduate degree in LIS	37	6	Exact educational environment/setting experience not specified	12	6
Specific software knowledge	32	7	Frameworks and curricula for education and training	12	7
Experience in HE (University) environment	29	8	Experience of working with young people	9	8
Exact educational environment/setting experience not specified	27	9	Specific software knowledge	8	9
Frameworks and curricula for education and training	27	10	Teaching and training skills	8	10
Exact LIS qualification not specified	25	11	Experience in HE (University) environment	7	11
Undergraduate degree in LIS	16	12	Previous work experience within an information related role	6	12

Promotion/Marketing	14	13	Exact LIS qualification not specified	5	13
ECDL	12	14	ECDL	4	14
Virtual Learning Environments (VLEs)	11	15	Membership of an appropriate professional body (not specified exactly)	4	15
Experience in an FE/HE College environment	9	16	Postgraduate degree in LIS	4	16
GCSEs	8	17	Exact IT qualification not specified	3	17
Specialist subject knowledge	8	18	IL & supporting users	3	18
Chartered member of CILIP	7	19	PTLLS	3	19
Experience of working with young people	7	20	NVQ/Diploma in LIS	2	20
Exact IT qualification not specified	5	21	Promotion / Marketing	2	21
A Levels	4	22	Cert Ed	1	22
Cert Ed	4	23	Certificate in Delivering Learning	1	23
Certificate in Delivering Learning	4	24	Experience in an FE/HE College environment	1	24
PGCE	4	25	Member of HEA	1	25
Delivering induction sessions	3	26	PGCE	1	26
Postgraduate degree (subject not specified)	3	27	PGCHE	1	27
Exact teaching qualification not specified	2	28	Postgraduate degree (subject not specified)	1	28
NVQ/Diploma (subject not specified)	2	29	Undergraduate degree (subject not specified)	1	29
PTLLS	2	30	Undergraduate degree in LIS	1	30
NVQ/Diploma in LIS	1	31	A Levels	0	31
PhD (subject not specified)	1	32	Delivering induction sessions	0	32
Member of ALT	0	33	GCSEs	0	33
Member of CIPD	0	34	Member of ALT	0	34

Member of HEA	0	35	Member of CIPD	0	35
Member of IfL	0	36	Member of IfL	0	36
Membership of an appropriate professional body (not specified exactly)	0	37	NVQ/Diploma (subject not specified)	0	37
PGCert in Teaching and Learning	0	38	PGCert in Teaching and Learning	0	38
PGCHE	0	39	PhD (subject not specified)	0	39